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AN

ANALYTICAL INQUIRY

INTO THE NATURE OF

THE PROCESSES OF DIGESTION AND NUTRITION,

WITH PRACTICAL DEDUCTIONS.

By George Ross, Esq., Kennington.

(Continued from p. 510.)

Protein not the final Principle of the Digestion of Azotised Aliment.

My last paper contained an account of the effects of the various reagents present during the digestive process on azotised principles. I am anxious that it should not be conceived that I admit any one actual and final principle of nutrition produced by digestion. Neither protein, nor any other substance, is an uniform product of the digestion of the various azotised principles of our food, although, like protein, the basis of the albuminoid substances, there is one character which they must necessarily possess, namely, solubility in acid. This is the central point of a circle of changes, the extreme segments of whose circumference may exhibit different phases, displaying on one side the properties of albumen, on another those of casein. I have further endeavoured to show that the result of the digestion of azotised principles is the production of a substance from albumen resembling casein, and another from casein that has acquired the properties of albumen; yet these principles are not identical. When albumen performs the part of a base it resembles casein,—when casein acts as an acid its reactions are similar to those of albumen. Albumen is subject to the same law as casein, with regard to alkalies, but in a modified degree, since a very small portion of albumen is precipitated by a large proportion of liquor potassæ; but, under ordinary circumstances, albumen is soluble in caustic alkali. *Caseum* is more readily influenced in this mode by alkali, for when thus treated precipitation takes place by the influence of heat almost invariably, acquiring thus the peculiar character of albumen.

We can hence understand how the incoagulable product of digestion becomes coagulable in the lymphatic fluid and the blood, for these fluids betray alkaline properties, and must necessarily confer coagulability on the nutritive substances which are poured into them. The process of digestion develops a series of changes, commencing in the reduction, in the alimentary canal, of some primitive organised substance, and terminating in the reconversion of this substance to its original character, or to another similar to it in composition, and also, like it, final. There does not appear to be any distinct principle to which such substances are reduced prior to their reconversion, but each stage is one of transition. I conceive that these remarks apply equally to the albumen and fibrine of the lacteals, since they are found to vary in properties under different circumstances, and are essentially transitional.

Lactic Acid the Proximate Principle of the Digestion of Farina, &c.

I endeavoured to show, also, in my last paper, that lactic acid was one stage of the transitional progress of the reduction of farinaceous food; that this acid was not merely a product of the decomposition of *indigestible* aliment, nor of morbid irritation of the alimentary canal, but that it was an ordinary product of the digestion of farinaceous substances in the *small intestines*. Dr. Prout imagined that the collection of lactic acid in the stomach and bowels caused vomiting and diarrhœa; but I apprehend that this idea is hypothetical, for I cannot conceive that an acid whose reaction is so weak can be possessed of any qualities obnoxious to the alimentary canal. The presence of any acid in the stomach will not necessarily cause vomiting. This symptom is attributable, under the circumstances in which lactic acid is found in the ejected fluid, simply to an abnormal fermentation going on in the indigestible substance; and to the production of other substances foreign to the natural conditions, such as carbonic acid, and other gases which cause distention and irritation of the organs of digestion. Moreover, the mass itself, not being assimilated, overloads

the bowels, excites nausea, and hence the usual sequelæ. The nutritive properties of farinaceous food will next engage attention, but, in the first place, it will be necessary to decide which set of vessels, portal or lacteal, are those employed in the absorption of aliment.

Absorption of Aliment by the Veins.

Magendie, it is well known, established the fact of the capability of absorption by the veins, yet this fact has not been so productive of results as might have been expected. It is not yet known to what extent these vessels are engaged in the absorption of matters from the surface of the alimentary canal; but we find Liebig, with his usual acuteness, remarking, "it is possible that the non-azotised constituents of food, after undergoing some change, are carried from the intestinal canal directly to the liver, and that they are converted into bile in this organ, where they meet with the products of the metamorphosed tissues, and subsequently complete their course through the circulation." I became convinced of the truth this suggestion embodies, some time since, after a careful examination of the experiments on digestion performed by Professors Tiedemann and Gmelin. These experiments produced results in many and the most essential points altogether contradictory to expectation, and apparently inexplicable in the opinion even of so profound a reasoner as Müller; but this apparent contradiction arises, I apprehend, rather from an unwillingness to abandon received doctrines than from any fault in the experiments or anomaly in the operations of nature.

Analysis of the Experiments by Tiedemann and Gmelin.

These admirable physiologists found that the *solid* contents of the *serum* of the chyle in a horse, while *fasting*, contained, of

Albumen	76.2 per cent.
Animal matter soluble in water	6.7
Animal matter soluble in alcohol	16.
	98.9

They found after the digestion of a feed of oats

Albumen	61. per cent.
Animal matter soluble in water	3.
Animal matter soluble in alcohol (Of which 20 parts were *fatty matter*)	34.
	98.

Thus, after digestion, there is a less proportional amount of albumen than while fasting, which is quite inexplicable on the supposition of the absorption of this principle by the lacteals. Let us examine the point more narrowly. There are in the chyle of digestion 20 parts of fatty matter which do not exist in the other; these 20 parts are just one-fifth of the whole amount. Very well, then, if we add 20 parts of fatty matter to the original hundred, each of the ingredients, if no chemical change ensues, must lose a proportional quantity; in other words, a 100 parts now must contain proportionally less than a 100 parts at first. Subtract, then, one-fifth from each ingredient and it will stand thus:—

Albumen	76+5=15. and 76—15=	61. parts.
Animal matter soluble in alcohol	16÷5= 3. and 16— 3=	13.
Animal matter soluble in water	6÷5= 1.2 and 6— 1.2=	4.8
	19.2	78.8

Now, this calculation will be found to represent almost exactly the amounts of the various ingredients of the chyle of digestion; for after the fatty matter is subtracted the amounts stand thus:—

Albumen	61.
Animal matter soluble in alcohol	14.
Animal matter soluble in water	3.
	78.

The only difference is in the amount of the substances soluble in water, and this is too trifling to disqualify the value of the calculation, and may be correctly attributed to a defect in the analysis. We can, therefore, prove, by strict calculation, based on unexceptionable and unbiassed experiments, that in the horse, at least, the lacteals absorb only fatty matter. These are the relative proportions of the component principles.

Further, the relative proportions of the whole amount of solid matters in the serum of the different portions of the lymphatic system of a horse *fed on oats* are thus expressed:—

The serum of thoracic duct contains	3.04 per cent.
„ pelvic lymphatics.	3.1
„ chyle of lacteals	4.9

Now, this statement appears, at first sight, as irreconcileable as the former, but if we analyse it carefully it will appear consistent. The serum of the thoracic duct contains 3 per cent. of solid matter, but we have another table which shows that the proportion of solid matters in the thoracic duct of a *fasting* horse is 4.7 per cent., consequently 1.7 per cent. more than that of the fed horse.

If we subtract one-fifth from the solid contents of the serum of the fed horse (which

is the amount, as we have shown, of fatty matter) there will be only 2.4 per cent. left; *ergo*, the contents of the thoracic duct, during digestion, suffer a dilution of about one-half.

If, therefore, the solid contents of the serum are diluted to this extent, the coagulum, or fibrine, it is probable, would be diluted in the same ratio. I apprehend, however, that there is more or less fibrine secreted and poured into the lacteals according to varying circumstances; and even if these circumstances were invariable, I have no data for determining, *with exactness*, the amount of coagulum in the chyle of a fasting and fed horse respectively.

However, there are facts of the same kind of great significance. The same authors state that the amount of *dry coagulum*—

In chyle, after passing the mesenteric glands, is .... 0.37 per cent.
In thoracic duct 0.19
In pelvic lymph 0.13

Now, it is apparent that the amount of fibrine in the thoracic duct is only one-half of that in the lacteals, consequently that the chyle has been diluted to this extent, agreeing in exact proportion with the dilution of the serum. These data and calculations, of course, indicate that the mesenteric glands are the organs which pour the fibrine into the chyle *during digestion;* and this opinion is almost universally esteemed correct.

The next link in our chain of calculation yet remaining to be loosened, is this: granting that the chyle, during its progress through the lacteals, is diluted, in what way is this dilution effected? This is an important question, because it involves the functions of the lacteals. This dilution may be produced by four different means:—First, by absorption of water from intestinal surface; second, by the formation of water in consequence of chemical changes operating on the components of the chyle itself; third, by the secretion of water by the walls of lacteals and adjunct organs; fourth, by the pouring into the lacteals of a diluted fluid of a similar nature.

First—This cannot be the cause, since we find that the chyle of lacteals already contains a higher ratio of solid matter than that of the thoracic duct; *ergo*, less water, instead of more.

Second—These changes are not yet proved to take place; and if they did, the production of so large an amount of water must necessarily alter the proportional relation of the component parts to a considerable degree, which is not true.

Third—This is not probable, because this secretion would take place only during digestion; because this secretion would consist solely of aqueous particles; and because we know that the fluid added to the chyle by some of these organs is actually more abundant in solid matter.

Fourth—This is the only opinion, I think, that can be maintained. Dilution by this means certainly does take place, and the question remains to be asked—does it take place in the degree we estimate? Let us see.

We have read before that the amount of dry coagulum in the thoracic duct was .19 per cent.; in the lacteals .37 per cent.; in the pelvic lymph .13 per cent.; therefore that the pelvic lymph is a considerably diluted fluid. If we add three parts of pelvic lymph to one part of the chyle of the lacteals, then we shall have .76 in four hundred parts, and the fourth of this amount will be .19—that is .19 per cent, the amount of dry coagulum in the serum of the thoracic duct.

The proof of the correctness of this supposed quantity must consist in the exactness of its application to similar cases. Well, then, we have before seen that the solid matters in the serum of the lacteals of a fed horse amounted to 4.9 per cent, in that of thoracic duct to 3.04, and in that of the pelvic lymphatics to 3.1 per cent. Add three parts of pelvic lymph to one part of the chyle of the lacteals, and we have 14.2 per 400 parts, that is 3.5 per cent., which is one-sixth more than is contained in thoracic duct. This, however, is an approximation infinitely more exact than the intricate nature of the subject would have led us to expect.

The Lacteals absorb Fatty Matter, and not Albumen.

I have now minutely analysed all the exact data afforded on this subject by Professors Tiedemann and Gmelin; I have stretched no fact, and have generally brought even the decimals into calculation; so that my deductions are a necessity arising out of these calculations. What, then, do we conclude from this train of reasoning? First, that the lacteals do not absorb albumen simply as such; second, that no chemical change takes place in the components of the chyle; third, that the lacteals absorb fatty matter alone of the usual solid matters entering into the composition of chyle; fourth, that the radicles of the portal veins absorb the products of vegetable aliment, together with the reduced albumen that has not entered into combination with oil.

Oily Matter obtained from the Bile.

The effects produced by tying the biliary duct prove the positions advanced. It is needless to enumerate the various conflicting testimonies of the effect produced by this simple operation. Tiedemann and Gmelin have satisfactorily shown that ligature of the biliary duct prevents the appearance of oily matter in the lacteals; they further established that bile is not a solvent of fatty matter. What remains, then, but to admit that oily matter is either formed from choleic

acid or from the action of this principle on our aliment? In either case, I apprehend that the oily matter is derived from the choleic acid. The atomic constitution of choleic acid recognises the facility of this conversion, thus:—

Choleic acid .. C_{38} N H_{30} O_3

3 eq. of oily matter	33	30	3	
5 ditto carbon acid	5		10	
1 ditto ammonia		1	3	
	38	1	33	13 ch. acid + O_2

Nature of the Chyle-Globules.

Professor Müller has affirmed that the fatty matter does not give the opacity to chyle; and, if this be true, some doubt might be thrown on the correctness of the observation of Tiedemann and Gmelin respecting the absence of fatty matter in the chyle after tying the biliary duct. Müller attributes this opacity to the chyle-globules. Granting that the opinion of Müller is correct, still we have no reason to conclude that the chyle-globules are not chiefly composed of oily matter. That they are not formed in the chyle during its passage, nor are secreted into this fluid, is apparent, because they are found at the very commencement of the lacteals. I apprehend that these chyle-globules are formed of a nucleus of oily matter and an envelope of albumen, in the same manner as we observe in the oily matter of milk. This effect may be produced artificially, and there is every reason to suppose that it takes place during digestion. Their globular form is an evidence of this kind of production. It is not probable, however, that all the oil-globules enter into this combination in the lacteals, on the contrary, free oily matter is found, as we know, in chyle; but I conceive that the gradual disappearance of oily matter from this fluid is attributable to this cause.

The red particles of the blood may be formed from these globules, as has been already conceived by the most judicious physiologists. The property of these particles of running together when broken seems to indicate that they contain oleiform matter; an idea that has been suggested by Bostock. In this way only can we understand how the oxygen of the atmosphere, uniting with the red particles, can act upon oily matter so as to consume it for the production of heat. *Thus the quantity of heat evolved would be proportionate to the formation and destruction of the red particles.* It is an established fact that the power of producing heat in animals is proportionate to the amount of red particles contained in their blood.

The lacteals, then, absorb fatty matter derived from the decomposition of biliary matter; *in fact, the aliment for the lacteals is prepared by the liver.* This does not preclude the absorption by these vessels of fatty matters generally; on the contrary, fatty matter, taken as food, is largely received by these vessels. Tiedemann and Gmelin found that the whiteness and opacity in the chyle of dogs were most marked in those fed on butter. In a general sense the lacteals are the absorbents of fatty matter.

Formation of the Red Particles.

But let us advance a little further. In what manner are the blood-globules formed from the chyle-globules? I conceive that this result takes place in the thoracic duct, by the union there of the splenic lymph with the chyle. The red colour of the splenic lymph in horses, and other animals, but especially the graminivorous, has been long known; and, formerly, it was believed that the spleen was the organ destined for the formation of the red particles. This idea, announced by Hewson, was renounced, because these particles could not be proved to exist in the lymph; and the redness was attributed by Müller to mere filtration from the blood through the fine permeable tissue of the spleen; therefore the inference obtained that because it was a mere mechanical filtration it could only be the effect of chance, and that this redness did not indicate that the splenic lymph took any part in the vital changes. This is a prejudice striking at the very root of philosophic investigation. There is no such thing as chance in the animal economy; every effect is the product of the operation of a law, and this effect is the cause of a successive series of effects, terminating only in death. It is of no consequence whether a principle be a distinctly organised secretion or a mere filtration; still less, whether every secretion may not be a filtration; the principle exists, it exists for an end, and that end is sufficiently important for us to discover.

If the redness in the splenic lymph be not dependent upon the presence of the organised blood-globules, it must still depend upon the presence of the colouring matter of these globules; this must be admitted. If you allow the force of my reasoning, that the development of heat is a consequence of the destruction of the globules of the blood, then it is apparent that the colouring matter of these globules must be either excreted from the system, or enter into new combinations. That it is not excreted from the system in any degree proportionate to the destruction of the globules, is certain from the analyses of the various secretions; consequently, the colouring matter must recombine with fresh organised matter.

The spleen, then, is the organ for the elimination of the red colouring matter; and therefore in those animals whose respiratory actions are the greatest, we ought to expect to find most colouring matter in the lymph of the spleen, and this is the fact. This colour-

ing matter, entering into the thoracic duct, there combines with the chyle-globule, forming its external pellicle, the globule being, as it were, rolled up in it; and during the process of respiration the blood-globule is perfectly organised, being fully oxidised, and rendered fit for its office of maintaining animal heat.

This argument, which is analogous to the theory of Hewson, cannot be called hypothetical; it is deduced from facts, it is in accordance with them, and explains them. The excision of the spleen produces a development of fat because the chyle-globule has not undergone the necessary organisation. An enlarged spleen induces emaciation, from a contrary cause. Much theory has been expended on this subject; but no physiologist has yet given any satisfactory account of the matter. Remember, that I now confine attention simply to the lacteals.

Further, the nature of the chemical reactions on the nucleus of the red particle indicate its oleaginous character. Water causes it to change its form from a flattened elliptic to a spherical; acetic acid dissolves all the envelope, except a thin, delicate pellicle surrounding the nucleus; *alkalies alone* dissolve the nucleus. The reaction of alcohol cannot be determined. I know of nothing but oily matter that answers to these tests. These experiments were performed by Müller.

Respiration the Office of the Chyle-Globules.

During the course of my publications on typhus, I announced a new theory of the functions of the absorbent system. It may be in the memory of the readers of THE LANCET that Dr. Carpenter then laid claim to the priority of announcement of the same theory. The theory, as given by me, was to this effect, that the general lymphatic system converted oily matter into a compound of protein; the theory, as advocated by Dr. Carpenter included in this idea, not the oily matter, but the whole supposed waste reorganisable matter of the system, in which we materially differed. The only correspondence between us consisted in the expression of the general law. I have, however, since found that the palm of priority does not rest between Dr. Carpenter and myself; for, at the meeting of the British Association at Bristol, in October, 1836, Dr. Carson, of Liverpool, read a paper on absorption, in which he maintained that the lymphatics, as well as lacteals, absorbed *nutritious* matter. I have no particulars of the argument, but quote from a minute in the "British and Foreign Medical Review" for that year.*

The point on which the arguments of Dr. Carpenter turned was the existence of the chyle-globules, and the probability of their conversion into blood-globules. This probability I have endeavoured to establish on substantial grounds, and have declared what I conceive to be the mode of the formation and transformation. The end of this metamorphosis, however, is not, I apprehend, nutrition, but respiration; a result different to that advocated by Dr. Carpenter. So much for the chyle-globules.

As to my original theory of the formation of albumen from oily matter in the systemic lymphatics, by the operation of chemico-vital agencies, I shall not discuss it at present, but defer it until I have concluded the subject of digestion as carried on in the abdominal organs.

* No. 4, p. 599.

ON THE

ERRORS AND MISCHIEFS

OF THE

SOUND AND CATHETER,

AND THE

NATURE AND TREATMENT

OF

URINARY STRICTURE.

By T. WILKINSON KING, Esq., Surgeon.

*Strictures vary. The doctrine of variable disease illustrated by the history of senile prostatic difficulty. Opinions and cases. The tendency of disorders to subside spontaneously a basis principle in therapeutics.**

THE happy revolutions of the bodily functions which turn a fearfully disorganising erysipelas into a healthy granulating sore; the sweat or change of posture which subdues, as it were, by instant magic, an asthmatic paroxysm; the general glow of opium, or wine, that relieves a local pain; the work of days, which converts fever to convalescence; the products of digestion repairing a wasted body; the excretory depurations of the blood after the excesses of the table; the due disposal of the nutritive fluid to all parts, imposed by exercise, promoted by the mere lapse of time, or disturbed by partial efforts, cold, and indolence;—all these, I think, belong to the chief of the secondary laws of medical science.

The application of this law to explain the nature and treatment of stricture, without any great pretence to originality, will serve a double purpose.

That most diseases tend to spontaneous restoration is the theoretical principle assumed, and which I seek to illustrate by showing that it affects the history of stricture, and also the practical rules by which common urinary obstructions may reason-

* See also a general analysis, LANCET, Dec. 23, 1843, page 386.

ably be expected to be most readily and safely controlled.

It is absolutely the essential nature of ordinary difficult micturition to vary. Settled, slow evacuation of water is the obstruction of an irremediable cicatrix. Acute inflammatory stricture is a third and distinct variety. Admit these as fixed facts, and then the combinations of these states, and I am ready to admit, and even in part prepared, I think, to explain exceptions.

In former writings I have hinted that the senile affection of the prostate gland is a catarrhal hypertrophy, and analogous to many other affections of mucous organs. The importance of this fact in practice, and its value as a corroboration of the general theory of variable disorders, seem to me a sufficient reason for explaining my view of it somewhat more distinctly than I have hitherto done except to my pupils. It offers the additional advantage of explaining my views of the nature of common urethral obstruction.

The manifestations of the chronic enlargement of the prostate gland is seldom met with under the age of fifty. According to Sir Everard Home it is a rare occurrence for a man to arrive at eighty years of age without suffering more or less under disease of this part. "The more common causes (says he) of inflammation of the prostate gland are full living of every kind, inebriety, indulgence to excess with women, a confined state of the bowels, and exposure to the effects of cold; indeed, whatever increases the circulation of the blood about the genitals beyond the healthy standard may become a cause of inflammation in this gland, the blood-vessels of which lose their tone in the latter periods of life."—(On Diseases of the Prostate Gland, vol. i., p. 18, 19.) If we are to credit another statement, the disease occurs most frequently either in persons who have not used the genital organs so much as nature intended, or in others who have led a life of excess. (Wilson on the Urinary and Genital Organs, p. 332.) "It seems to me (says Mr. S. Cooper) better to confess that the etiology of this complaint is unknown. Nor are we rendered much wiser by conjectures about the effects of horse-exercise, or those of a retarded venous circulation in old subjects, in creating a tendency to the disease. I have known several persons afflicted who have led very sedentary lives."

To any one acquainted with the history of the variable, miscalled chronic, enlargement of the tonsil, and who has examined for himself the wide and thickened branches of the extreme air-tubes in old winter asthma, and the like, it will be easy to understand me when I call the old man's prostate catarrhal. And to reflect on the great number of radiating and branching mucous tubes which compose the prostate, and the possibility of its varying actively in its secretion and sanguineous injection, will seem, at least, to afford a probable account of its hypertrophy.

Gonorrhœa and stricture are not the least frequent causes of enlargements of the prostate, and point to chronic variable inflammation.

Struma of the prostate or of a lymphatic gland, is, I conceive, in the main, variable injection and hypertrophy, ending in simple *death* of a part, parts, or the whole. I cannot now digress to show that this is the essence of one great division of tubercle, but it is important to remark, that the prostatic enlargements are only late as to their serious and obstructive effect. I have met with the strumous affection much oftener than M. Louis, who may be said to have looked for it in those cases alone in which it was hardly to be expected. If it be but in part true, as Cooper, Home, and Brodie assure us, that enlargement of the prostate is proper to old age, it is certain that its final state, as well as its early stages, are not so often fatal. The mean age of serious prostatic difficulty I make to be under the sixty-fourth year; that of the fatal effects scarce a year later; and that of the admonitory effects a year or two earlier at least. Of course we cannot count the slighter cases that go on, even to the end, without any thought of applying for aid.

Some enlargement of the prostate is often met with after death, either singly or in connection with strictures, even before the fiftieth year. Out of thirteen fatal cases of males, taken indiscriminately above the age of sixty-five years, not one was found to have the true senile prostate as a marked affection. Two of them offered some prostatic difficulty in connection with urethral stricture, and one an example of malignant disease of the third lobe. In all, chronic diseases of various internal organs were prominent aggravations of decay; watery inflammations were very common, bronchitis frequent. These cases include all that were of the required age and the subjects of examination post mortem at Guy's Hospital, for a course of years.

We find the early stage of the enlarged prostate attended with a copious watery secretion, even less viscid, and scarcely more coloured or opake, than the saliva of infants, the excess of which last I find is greatly, if not totally, dependent on cold. The similarity of the prostatic fluid to urine, and its being principally discharged, when in excess, at the time of micturition or defecation, may partly account for its variable production being little noticed. The more the circumstances of variable capillary action are borne in mind, in connection with chronic hypertrophy, whether of a limb, a hollow muscle, or a secretory organ, the more clearly and forcibly we shall see occasion to distinguish between what is acute, what is truly chronic, and what is variable

in disease. To study the subsidence of disorders, and even the quiescence of disorganisation, will also throw light on the precursory actions, whether in the prostate, the skin, the kidney, or the heart.

Sir B. Brodie remarks, that with old age "the prostate gland usually, I might, perhaps, say invariably, becomes increased in size. (P. 151.) The chronic enlargement of the prostate gland may be said to be a disease of a peculiar kind, having no exact resemblance to what we meet with in any other organ." He rather compares it to bronchocele. Again, "The prostatic enlargement of a man advanced in life cannot be remedied like that of a young man, any more than his grey hairs can be converted into black."

The evolution of the "third lobe" appears to be a very simple matter. A certain amount of glandular tumefaction distorts the urethra within the prostate, by raising the two ends of this portion of tube. The swelling of the posterior margin of the prostate produces a transverse ridge between the cavity of the bladder and its outlet. This ridge is the least part of the gland, which is strictly confined by a kind of tunica albuginea; it is free, therefore, to swell up, symmetrically or not, into the cavity of the bladder. The more partial hypertrophies of the prostate are still analogous to cases of old catarrh chiefly affecting one lung, or a part of one.

Suppose a hemisphere made up of radiating branching tubes, and these tubes all swelling simultaneously, the figure of the mass would be changed. Its plane surface would become a hollow cone. Thus we may explain the distortion of the urethra with the enlarged prostate, and even corroborate the idea of tubular catarrhal hypertrophy. This observation has no diminished force or value, when we study the partial and irregular enlargements of the chesnut-shaped gland.

I do not always impute obstruction to the third lobe, even when it is large. Examining this part, by removing only the fundus of the bladder (which I learned from Dr. W. Stroud), and dissecting all the exterior of the gland, may give different notions of the cause of obstruction. The gland may present into the bladder as a soft wide os tincæ, fissured vertically, and defective only above; either of the lateral lips may predominate, or the third lobe may be very much on one side. The first great and certain evil is compression of the urethra, and this may be the sole mischief. The second difficulty is loss of power in the bladder. The compensating muscular hypertrophy found with the stricture of adults is deficient in three out of four cases of prostatic delay, and often remarkably so. All the coats may simply yield to distention. The third evil is cystitis; it is, perhaps, a serious complication in every second case only.

The fourth cause of danger is bad catheterism, and by no means the most infrequent. Sand in the ducts is common. All the chief desiderata are comprised in the medical management of the case.

The dilation of prostate-ducts, the excavation of cells in the gland, the mingling of such cells, to form a mere bag of reticulations, have all their analogies in the chronic effects of inflammation and obstruction in the air-tubes.

The common affection of the prostate does not become obstructive until considerably advanced. The secretion escapes with the urine, and thus its variable course is often little marked. I have elsewhere indicated the distinctions between the secretory and hypernutrient irritation.*

It is probable that some hypertrophy of the bladder is quite sufficient to overcome all prostatic obstruction, excepting that of the third lobe, and that of sudden and general injection of the enlarged gland, which is especially the case of a variable affection aggravated.

When careful inquiry is instituted in the case of an old man subject to urinary delays, it will every now and then appear that the first, or, perhaps, a recent sudden attack, is attributed to a checked perspiration, an unexpected change from warm to cold weather, or to the inconsiderate disuse of warm clothing; and often, under such circumstances, speedy and free recourse to opposite measures removes the increased injection and tumefaction of the prostate at once, and the case is, for the time, cured, though extremely liable to relapse. It is allowed on all hands, I think, that curative remedies avail little in cases of senile prostate, and I cannot but conclude that the cause has been too much overlooked.

Sir A. Cooper appears to have gone farther in regarding the disorder as necessary than even Sir B. Brodie. He speaks of it as the consequence of age, and not of disease; as a salutary change, designed to produce partial retention, at an age when, but for the prostate† incontinence of urine would almost constantly occur. "It makes the urine pass slower than natural; but this may be excused, when it is the means of preventing a continual wetting of the clothes." This is rather a peculiar instance of "final cause." The fact is, I conceive that chronic enlargement of the prostate, if it begin at all,

* See "Rudimentary Considerations on the Nature of Irritation," (nutrient, secretory, absorbent, and nervous,) and some fallacious instances in the "Medical Gazette," 1843.

† An argument, by the way, which points to the fact, that all nutrition may fail, not to say hypernutrition be absent as a natural course.

will be found to commence much earlier than is supposed, and than there is any occasion for in a remedial sense.

The plumpness and deep vascular hue of the prostate are very remarkable sometimes at forty years of age, but with strength rather than weakness of the bladder.

The account of the palliative treatment of enlarged prostate in its troublesome stages, plainly involves the fact of variable tumefaction. Gentle depletory plans and habits bring relief. Negligence, winter, or irregularities, induce relapse of injection, swelling, and obstruction. The pain in the glans, the numbness of the prepuce, the perinæal tension, the uneasiness in the loins, back of the thighs, and even the flattening of the fæces, may be found to vary.

The partial enlargement of the prostate seems, on the whole, to affect less elderly men, but they are still, evidently, of the nature of mucous-tube-hypertrophy.

One effect of enlargements of the prostate gland is to render its secretion extremely viscid and very abundant. This ropy mucus comes entirely from the inflamed prostate gland, as is proved, says Sir E. Home, "by its having been found, in one instance, with one extremity floating in the bladder in the dead body, while the other extremity appeared divided into small filaments, terminating in the orifices of the excretory ducts of the gland at the veru montanum. The quantity of secretion is observed to depend more upon the degree of irritation than the actual enlargement of the gland, and, as this increased secretion happens in cases of swelling of this part from strictures, where the body and lateral lobes are alone affected, it is inferred, that the disease of the middle lobe only contributes to this effect by keeping up a straining and disturbance of every part of the gland." (Home, p. 32.)

The subjoined abstract of Sir E. Home's cases of prostatic affection is intended to illustrate the opinion that the disease is chronic, variable, and catarrhal (humoral); that cold is a common cause of relapses and aggravations, sudden tumefactions and obstructions; and that gradual and spontaneous subsidings of the local impediments are naturally affected by a series of constitutional changes which science and prudence may facilitate.

Cases of Prostatic Enlargement involving the Third Lobule, treated by simply drawing off the Water.

Case 1 (p. 109).—Ætat. 68; had *two* winter attacks, one in April; cured in May.

Case 2 (p. 113).—Ætat. 75; retention; catheter. The same, ætat. 77; cured.

Case 3 (p. 115).—Ætat. 72; catheter thrice a day; well in two months. After two years a *relapse*; well in ten weeks. Two years more the same. Died of abdominal affection.

Case 4 (p. 117).—Ætat. 64; retention; catheter; well in a month. After four years had a fatal attack out of town.

Case 5 (p. 132).—Ætat. 70; stricture fifty years; daily catheterism; cured.

Case 6 (p. 134).—Ætat. 53; stricture fourteen years; daily catheter; well in one month.

Case 7 (p. 136).—Ætat. 70; old stricture, dysuria, and obstructive mucus; one daily catheter; *relapses* from cold.

Case 8 (p. 139).—Ætat. 72; stricture fifty years; distressed till eighty.

Case 9 (p. 142).—Ætat. 70; stricture, old; daily catheterism.

Case 10 (p. 144).—Ætat. 48; stricture eighteen years; viscid mucus (*attacks by cold*); catheterism daily.

Case 11 (p. 148).—Ætat. 53; obstruction seven years; peritonitis; third lobe; death.

Case 12 (p. 150).—Ætat. 78; obstruction some years, with yellowish discharge; *varying*; lived two years.

Case 13 (p. 154).—Ætat. 70; irritations from *cold*; fatal abdominal affections; third lobe.

Case 14 (p. 157).—Ætat. 66; sudden obstruction (September 19). Spasms, *inflammatory*; laceration; death.

Case 15 (p. 164).—Ætat. 70; frequent micturition (October 18th, attack); laceration; death.

Case 16 (p. 168).—Ætat. 77; *a cold*; dysuria; catheter two months; with the *fourth* like attack dropsy and death.

Case 17 (p. 174).—Ætat. 65; catheter five years; fatal abdominal affection.

Case 18 (p. 211).—Ætat. 36; rectum-distress, relieved by hemlock; catheter. (Lateral lobe affection.)

Case 19 (p. 214).—Ætat. 36; rectum-distress, relieved by hemlock; *relapse* by cold or diet.

These examples do not require comment with reference to variability, although, with respect to other points, much remains to be desired. The following also bear out the inferences of catarrhal variability.

Case.—Ætat. 53; much dependant on the catheter for five years; his urine contains *thready* mucus; large prostate felt per anum; a recent aggravation. Quiet and a steady course of remedies set him at his ease in *fourteen days*. In a few days more a sudden *relapse* and fresh need of the catheter. As he again recovered the instrument was only needed in the evening, after the exposure and repletion of the day. The repose, wasting, and warmth of the night made him free in the *morning*.

Case.—Ætat. 65; *more or less* difficult micturition two years. A sudden relapse while under treatment, from cold; died typhoid.

Case.—Ætat. 24; excesses and some supposed strain, followed by two years of urinary difficulties; then the repetition of the like causes produced complete retention.

No stricture. Catheters and a gentle course of restraint and remedies sent him away easy for the time.

Case.—*Large Prostate.*—An intelligent, prudent, laborious countryman, ætat. 68, hale, youngish, and not wasted, has had frequent and uneasy micturition twenty years; no discharge or marked variability with season, but some aggravation with little excesses, he says. Now relieved by prostate-catheter, but none had ever been used before. On the whole he is easiest in the morning, after the comfort of bed, he says.

It is sometimes difficult to discover even the slightest indication of variability. The following may be regarded as a doubtful case:—

Case.—*Retention of Urine from Prostatic Obstruction* (?)—July 8th, 1835. J. H., ætat. 57, by trade a shoemaker, of healthy but lean figure, and generally temperate; is a widower, with a family, and his business does not allow him meat daily. Twelve years ago he had an attack of lumbago, or pains in the loins and arms. He has since had occasional attacks of rheumatism, otherwise he has been always well. Twelve months back he was suddenly seized, after much stooping in the day, with stoppage of his urine. On attempting to pass it he had much straining and difficulty, and pain in the loins. He was relieved, after sixteen hours suffering, by the catheter, which made him bleed much; he was confined for a week, and his stream of urine was afterwards diminished in size a little. For four months he remained well, when he was again attacked, and again three months after that, each time being relieved by instruments. Three months ago he applied in the same state, but the affection had come on by dribbling, on trying to make water. The catheter was passed, and he was able to go to work the next day.

July 8. Was again suddenly seized at work, and was only able to pass a little water by drops; in a short time he again tried to make water, and, on failing, applied for aid. One o'clock, p.m. Was ordered a hot-bath, colocynth, magnesia, and salts. At nine o'clock, not having made any water, the catheter was passed, without much difficulty but not without some force. After this his micturition was free, and he left.

Case.—Ætat. 24; after gonorrhœa, some dysuria two years; a slight *sticky discharge* in the *morning*. The urine now clear, with a *stringy* sediment. The left lobe felt, per rectum, to be enlarged. Frequent micturition, *occasionally preceded* by a *gummy* discharge. Medicines soon effected material relief.

When the vesical lining becomes the seat of acute inflammation, whether for the first time or in the way of relapse, the muscular coat, from an altered state of its nutrition, which is also inflammatory, or from excito-motory agency (?), is liable to become excessively irritable, even with the smallest distention by urine within. This state, or the mildest affection of the kind, may be greatly aggravated by urethral obstruction, and with distress much straining augments all the evils. When the size and form of the tumour are such as to allow the greater part of the urine to pass, though with great effort, Sir Everard states that the symptoms may continue nearly the same for months, liable, however, to occasional aggravations from slight causes, and becoming more or less relieved when these are removed. Nay, he observes that the symptoms may even lessen, although the disease is not at all diminished, a circumstance which is ascribed to the muscular coats of the bladder having acquired greater strength and the internal membrane having lost, from habit, the sensibility which it possessed in the earlier stage.

All these are the especial indications of variable and catarrhal affections.

It is not easy to define irritable bladder; with us it means "inflamed muscular coat," a genuine case of spasm, aggravated by dilation and amenable to antiphlogistics. It is subject to relapses from general causes as well as local, and it may end in what is often spoken of as irritable bladder, namely, hard permanent contraction or settled stricture of the bladder itself. There is an analogous inflammatory tenesmus, and also a gastritis.

"The mucous membrane becomes affected with chronic inflammation, and it secretes a thick tenacious mucus that has an offensive ammoniacal smell. This complication adds greatly to the patient's sufferings and danger. Indeed, chronic inflammation of the mucous membrane of the bladder is one of the most frequent causes of death in neglected cases."*

I have elsewhere endeavoured to establish the peculiar characters of variable and steady chronic diseases. The latter should be devoid of all reparative acts, and dependant on a cause which is unchanging or fixed and augmenting. (See a Paper on Disorders which are variable, and on the practical inferences which are deducible from the character of changeableness. Guy's Hospital Reports, No. 11.)

With respect to the treatment of enlarged prostate on the foregoing principles, the causes of distinct relapse seem to be the same as those of the first gradual manifestation of difficulty, and they are, for a time, again and again obviated by the mere necessities of the patient, and cannot be neglected with impunity. All gentle excretory acts, as by any excretory remedies,† and some confinement of the patient, remove the

* Cooper's Dictionary.

† See a "Sketch of the Humoralism of Remedies" in a recent number of the "Provincial Medical Journal."—T. W. K. Dec. 23, 1843.

temporary inflammation, or rather allow the tumefaction to subside. Prudent and tonic habits both prevent recurrence and obviate the susceptibility of the body to be influenced by slight external disturbing causes, as cold. Warm clothing is often more than food to the aged. Warmth and abstinence remove the over-action which follows cold and repletion.

The catheter is here often indispensable, for a short time, at least, but there are no cases in which it is more liable to go wrong, and with the worst effects. It is by attention to remedies and exciting causes, that the instrument will be least often needed, and most safely employed.

There are cases of enlarged prostate, in which it seems almost impossible to pass an unyielding catheter into the bladder without a false passage. I have not yet found out how many times one enlarged prostate may be pierced by catheterism.

I shall next endeavour to show that the chief principles here brought forward have the same application to the circumstances of common strictures of the urethra.

Bedford-square, Jan. 1844.

CASE OF TALIPES EQUINUS CURED BY OPERATION.

To the Editor of THE LANCET.

SIR,—If you have a corner in your valuable periodical, may I claim insertion for the following case of talipes equinus, successfully cured after existing for seven years. I have enclosed it, not that there is anything particular in the case itself, but merely to draw attention to the very superior mode of treating distortions by dividing the tendons implicated, than by the long, painful, and uncertain mode of mechanical distention.

Mrs. Martin, of Newmarket, aged 46, about seven years since, after a violent attack of hysteria, with derangement of the spino-motory nervous system, was left with rigid contractions of the muscles at the back of the leg, which has existed ever since.

Dec. 5, 1843. The feet present the appearance indicated in fig. 1, with a slight turning in of the toes, as in "talipes varus," the tarsal and metatarsal bones forming almost a straight line with the legs. Mechanical apparatus had, from time to time, been applied without affecting the slightest benefit, and she appeared to have abandoned all idea of ever walking. Having operated in several cases of distortions, I did not scruple at once to recommend it in this, and the operation was readily acceded to on the day above mentioned. With the assistance of my friend, Mr. Millar, I freely divided both Achillis tendons, after the method of Stromeyer, with but slight pain or loss of blood. The tendons were found to be considerably enlarged and thickened, the feet were placed in pasteboard splints, and on the third day gentle extension was applied, so that on the

Fig. 1.

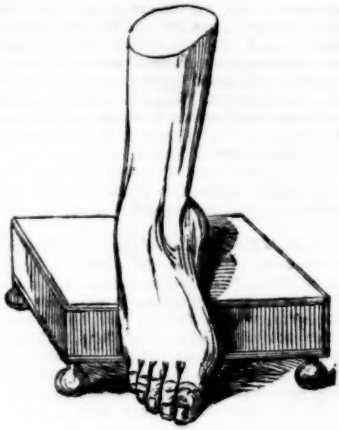

Fig. 2.

seventh day from the operation the feet were brought to right angles with the legs, and the patient was able to stand. It is scarcely necessary to recapitulate the daily rapid progress of the case, and I think it sufficient to state that, with the assistance of her husband's arm, five weeks after the operation, she walked to church, and has now so far improved that I feel convinced, in a very short time, when the muscles have recovered their tone, she will walk as well as she ever did in her life. I am, Sir, yours obliged,

F. PAGE.

Newmarket, Jan. 17, 1844.

P.S.—I am quite certain that the grand thing to be attended to in these operations is the care required in the proper adjustment of the instruments after the operation, and that I owe the rapid cure in this case to the judicious management of this department by Mr. Martin, who is most ingenious in these matters; at the same time it is quite evident that mechanical treatment alone never could have effected a cure. Fig. 2 shows the present appearance of the feet; they are somewhat swollen.

OBJECTIONS
TO THE
VEGETABLE ORIGIN OF PORRIGO DECALVANS.

To the Editor of THE LANCET.

SIR,—In last week's LANCET, No. 1064, we are favoured with an abstract from the "Med. Chir. Rev." purporting to prove the vegetable origin of porrigo decalvans, to which is appended the following remark—"We have recently been enabled to confirm the observations of M. Gruby." A very short review of the subject, I believe, will prove the fallacy of the doctrine. The first objection I have to make is, that instead of the bald surface being covered with dry scales, or a white brawn-like powder, as M. Gruby supposes, this condition never exists in the disease under consideration, the external appearances of porrigo decalvans presenting a bald, smooth, and remarkably shining indentated surface.

If the disease produces no powdery secretion we have none to examine; therefore I pass to the second objection,—"The hairs usually break off at the point where they are invested with the vegetable covering."

In porrigo decalvans the hair falls out, bringing the bulb with it, through absorption of the adipose structure, in which the bulbs are included, and from which the hair draws its nourishment; the absorption of this matter produces the remarkable indentation or flattening in each bald patch, and constitutes the pathological nature of the disease.

Now, in the common ringworm of the scalp, the porrigo scutulata of Willan, to whom we are indebted for the term decalvans, the hair does fall or break off, and is covered with an incrustation.

Third objection: "the vegetable nature of porrigo decalvans is a fact that speaks for the contagiousness of the disease." Now, porrigo decalvans is not contagious, and this the professor may take for granted, as my opinion is not grounded on the result of a few stray cases, but from facts observed daily in this particular disease for some years back. The conclusion that I have come to is, that M. Gruby, and the promulgators of his hypothesis, have confounded one disease with another. I do not say with the porrigo scutulata only, for there are other diseases of the scalp with which those not practically acquainted with them may very easily confound it; to prevent confusion is the object of my writing.

A great barrier to the successful treatment of this disease within a satisfactory time, in many cases, arises from the almost utter impossibility, on the part of the practitioner, of being able to counteract the immediate cause when discovered;—poverty, grief, immoral habits, being frequently opposed in strong array against our best-directed efforts to check the increased actions of the absorbents; therefore, until this has been in a great measure accomplished, by appropriate internal remedies, regimen, and restrictions, all external applications should be avoided, or they may prove highly prejudicial. When proper, almost any stimulating unctuous preparation will bring about the desired cure. These difficulties I feel pretty certain would not exist if the disease, porrigo decalvans, derived its origin simply from vegetable growth. I have the honour to be, Sir, your obedient servant,

J. H. HORNE, Surgeon.
Princes-street, Coventry-street,
Jan. 23, 1844.

ANEURISM OF THE UMBILICAL CORD.

To the Editor of THE LANCET.

SIR,—Perhaps some of your readers may have seen cases like the following which occurred to me whilst at Exeter last summer. Yours obediently,

H. J. M'DOUGALL.
University College, Jan. 23, 1844.

On the 20th of May last I was requested to visit Mrs. Down, ætat. 35, the mother of two children, and the wife of the captain of a trading vessel residing in Centre St. Friars. She had been in labour some time, Mr. Pridham, who was engaged to attend her, being from home. The breech presented, and the child was born shortly after my arrival, having, from the state of the cuticle, evidently been dead some time. Whilst withdrawing the placenta Mr. P. arrived, and, on examining the funis, called my attention to a tumour, the size of a hen's egg, about two inches from its placental extremity. Dividing its coats, which were only the coverings of the cord, layers of fibrine appeared, and in the centre a coagulum of blood. I made a further examination, and having fixed an injection-pipe in the vein, threw in water, which issued from a transverse fissure in the vein about the centre of the tumour, which was thus a genuine false

aneurism. The preparation of the cord is in the Exeter Dispensary. The fœtus had attained only about seven months' development, although the woman stated that she was "over her time."

ASPHYXIA FROM HANGING.

To the Editor of THE LANCET.

SIR,—My attention has been drawn to a very interesting case of asphyxia from hanging, lately published by Dr. Shearman (LANCET, p. 468). The recovery of the patient from the immediate effects of the suffocation satisfactorily proves the judicious treatment which was adopted; and I confess that I was much surprised to find the propriety of the practice which was pursued questioned, but still more at the extraordinary and most reprehensible conduct of the coroner. I am fully aware that coroners, in the arbitrary exercise of their office, frequently refuse an investigation into the cause of death when absolutely necessary, and that most absurd and improper verdicts are returned, often not in accordance with the evidence, and in direct contradiction to the facts which an examination would have developed. Of this I have given some examples in a former number of the Journal, which were copied into the *Times* of the 26th of January, 1841. But this is not at all extraordinary when it is remembered that this important office is too often held by low, ignorant men, who are totally unfitted for it by their education or acquirements, and seek it to supply the deficiency of income, which the failure of their original occupation, either from want of ability or industry, has occasioned.

Of course I do not intend to apply these observations to the functionary on whose conduct I have been commenting; I know nothing of him or his qualifications, but in this case his course of proceeding seems to have been most uncalled for and improper. He not only refuses a necessary examination, but slanders the reputation of a practitioner, whose relation of the case must convince every intelligent reader of the soundness of his judgment and propriety of his practice. He who, sitting as judge, was bound to confine himself to the evidence, listens to the gossip of a practitioner, who is neither a witness or before the court, so as to be subject to cross-examination, and upon the authority of that gossip impugns the practice of a medical witness, thereby giving currency to reports highly injurious to his character. If such a case had occurred to me I should have endeavoured to vindicate myself by an action for slander against the coroner, if such a course had been open to me, as I have no doubt it would.

The cause of death in this case was, in all probability, secondary asphyxia, examples of which are not uncommon. I have seen several, one of which was published in the "Provincial Medical Journal" for the 24th of February, 1843. The coroner and his friend, "the eminent practitioner," who gave him such valuable information, would do well to read Dr. Marshall Hall's Gulstonian Lectures for 1843, where they may find, under "Secondary Asphyxia," the following observations:—

"There is another interesting view of this important subject. The danger is not altogether over when the patient appears to be restored from the state of asphyxia. The respiration and the other functions may proceed nearly naturally for some time—for some hours even—and suddenly convulsions may seize the patient, and death may ensue."

"The blood apparently remains poisoned. Time, as in so many other cases, is an important element in the perfect restoration to health."

"A soldier was taken out of the Thames in a state of asphyxia; animation was restored, but many hours afterwards he was seized with convulsions, and expired," &c.

At page 74 a case is related of a girl who had thrown herself into a pond, and was recovered from the immediate effects of suffocation, but who died on the following morning of secondary asphyxia. I am, Sir, your obedient servant,

JONATHAN TOOGOOD.

Bridgewater, Jan. 17, 1844.

CASES IN MIDWIFERY.

By DR. JOHN HALL DAVIS, Physician to the Royal Maternity Charity.

LINGERING LABOUR, WITH RIGIDITY OF THE MOUTH OF THE WOMB.

ON Saturday, Sept. 24, 1842, at half-past one o'clock, a.m., I was requested by a professional friend to visit a patient in labour with her eighth child. She had been the subject of teazing inefficient pains for several hours. Her previous labours had not been difficult. The pelvis, on examination, was found to be of ample dimensions; the head at the brim; the orifice of the uterus about two-thirds dilated, and its circumference rigid; the pulse hard and full; skin hot and dry; and there was a deficiency of the lubricating mucus commonly present in the parturient state. She was of a full habit of body. I advised the abstraction of blood from the arm. Twenty ounces were taken before any sensible effect was produced; a moisture then appeared on the skin and the pulse was much softened. On examination, *per vaginam*, the genital surfaces were now

found freely moistened with mucus, and relaxed; the patient expressed herself as relieved from a sense of great oppression, and the pains now became more of a bearing-down character. At four, a.m., I was informed that the head had entered the cavity of the pelvis. At nine, a.m., the pains having again become inefficient, I was requested to see the patient again, whom I found desponding and spiritless. At the desire of my friend I remained in the room, and having somewhat encouraged the patient, the uterine action returned in full vigour in the course of a few minutes, and the child was born within twenty minutes afterwards, without any further interference. After the birth hæmorrhage supervened, which, with her, had been an usual occurrence. The placenta, not morbidly adherent, was separated from its attachment and brought away, and the uterus readily contracted. For the sake of security, however, against relaxation of the organ, and a consequent recurrence of the hæmorrhage, the T-bandage and compress were applied. Her recovery was as rapid as after any former confinement.

ARM-PRESENTATION — THE CHILD PUTRID— DELIVERY BY EMBRYOTOMY.

Sept. 6, 1837, nine o'clock, a.m. I was requested by Mr. Hunt, formerly house-surgeon at University College Hospital, to visit a patient to whom he had just been called, in labour with her eleventh child. The pains had commenced on Monday morning, at half-past four o'clock, a.m., and at two, p.m., the parish midwife was fetched. The liquor amnii was discharged at four, p.m., after which the pains flagged. The surgeon for the district was sent for, but not wishing to undertake the delivery, the case was left without further aid till the time of Mr. Hunt's being called in.

The following was the state in which I found the patient:—Pains strong; a hand protruding through the outlet, with the palm directed to the hollow of the sacrum; the arm and presenting part of the trunk much swollen; the skin peeling off from the extremity in several places. On making a cautious attempt to turn the child I found the uterus strongly resisting my efforts. The pulse being 120 and hard, skin hot and dry, and some distress being felt about the head, blood was taken from the arm; my friend withdrew thirty ounces in a full bounding stream. The patient did not feel in the least faint, but expressed herself thankful for the relief which it brought her. The child being dead and the uterus firmly contracted upon its body, I determined, without further loss of time, to deliver by the only means which remained to me, namely, by embryotomy. The chest was perforated beneath the scapula, and a considerable quantity of putrid gas discharged from the cavity of the trunk. Some of the viscera were removed, and upon traction being now applied by a blunt hook, the fœtus was readily brought down. The head, by reason of its putrid state, freely collapsing, offered but little obstruction to the progress of the diminished trunk. The child having been born, the uterus contracted and urged the placenta into the vagina, whence it was at once removed.

Visit at half-past seven, p.m. Has passed urine in considerable quantity and without pain; feels very comfortable; pulse 78; tongue clean.

Sept. 7. Pulse 78; tongue clean; no pain. The bowels have been opened by castor oil.

8. No pain; pulse 84, being a little excited by the removal of the child for burial.

9. Skin cool; sleeps well; tongue quite clean; pulse 78. Ordered castor oil, as the bowels have not been moved since the 7th.

10. The bowels have acted three times. Her recovery now progressed rapidly.

ON LARGE DOSES OF THE NITRATE OF POTASS.

To the Editor of THE LANCET.

SIR,—In your report of the discussion which took place at the London Medical Society on the 22nd of January, I have just read that Dr. Johnson, Dr. Willshire, and Mr. Headland, expressed their conviction that the large doses of nitre taken by the patient whose case was under consideration might have been the cause of inflammation and suppuration of the kidney. The patient in question had taken two drachms, three times a day, previous to the attack. Dr. Johnson also stated that he had seen half-drachm doses very injurious to the stomach.

Having, during several years, seen the nitrate of potass extensively administered in *very large doses*, and having myself often thus prescribed it, I am able to assert, with the greatest confidence, that the opinions delivered by the gentlemen who took part in the above debate, unless qualified, are totally unfounded. The nitrate of potass is, certainly, an irritant poison, and capable of giving rise, as such, to inflammation and perforation of the stomach, if administered in large doses, but only when taken in the form of a powder, or of a very concentrated solution. When largely diluted in a fluid one or even two ounces may be taken in the four and twenty hours, not only without giving rise to any toxical symptoms, but with great benefit in certain morbid states of the economy.

This must appear a rather startling fact to those who have formed their opinions respecting the properties of nitre, not from their own experience, but from modern

works on materia medica and toxicology. Thus, in the last edition of Thomson's "Dispensatory," I find the extreme dose which can be taken *in safety* stated as two drachms. In very large doses, such as from four drachms to one ounce, says Dr. Thomson, it occasions vomiting, hypercatharsis, bloody stools, convulsions, and sometimes death. Beck, in his "Elements of Medical Jurisprudence," gives several cases in which doses varying from an ounce and a half to two ounces, proved fatal, and others in which the patients recovered, but after experiencing all the symptoms of poisoning by an irritant substance, and suffering for months. Every medical man is acquainted with the interesting experiments of Orfila on dogs, with reference to the action of the various poisons. He found that the ingestion of five drachms and a half produced death if the œsophagus was afterwards tied. Christison, in his admirable "Treatise on Poisons," considers nitre in the same light as the other authors whom I have mentioned, and brings forward several fatal cases extracted from various sources. With his usual discrimination, however, he appears to perceive that the toxical properties of the nitrate of potass have been much exaggerated, and states that a gentleman of his acquaintance once took an ounce by mistake for Glauber's salts, and retained it above a quarter of an hour, without experiencing any other unpleasant symptom than several attacks of vomiting. He also mentions the experiments of Dr. Alexander, who found that he could himself take as much as *an ounce and a half* of nitre in the twenty-four hours, if largely diluted, without experiencing any bad effects from its ingestion; and the instance related by M. Tourtelle, where two ounces were retained altogether, and caused only moderate griping, with considerable purging and flow of urine.

In reality, the key to the different results exhibited in the above cases is to be sought for, not in idiosyncrasy or constitutional insensibility, engendered by disease, as Dr. Christison at first suggests, but in "difference in the mode of administration," which he mentions lastly as a possible explanation. When the nitrate of potass is given in a small compass, and in a single dose, half an ounce will act as an irritant poison, and occasion acute inflammation of the mucous surfaces; but if it is largely diluted a much greater quantity *may* prove innocuous, even if given in one dose, and *is sure* to prove so if administered in divided doses during the twenty-four hours.

It is principally in acute rheumatism that large doses of the nitrate of potass have been given. From some researches made by one of my friends and late colleagues, M. Aran (Journ. des Connais. Medico-Chirur., 1841), it would appear that the nitrate of potass was used in large doses in the treatment of rheumatism during the last century by several English physicians, whose names I am unable to mention, not having M. Aran's paper by me. At a late discussion on the subject, which took place at the Académie de Medicine, it was stated that several Italian physicians of the modern school had thus administered it, and that twenty years ago, in Paris, M. Kapler, physician to the Hôpital St. Antoine, and M. Bagneris, physician to the Invalides, had also given nitre in large doses in the above-named disease.

I believe, however, that M. Gendrin, the physician to the Hôpital de la Pitié, is, of all modern physicians, the one who has paid the greatest attention to the therapeutic properties of large doses of the nitrate of potass in rheumatism. After trying, comparatively, the efficacy of the various plans of treatment which are resorted to in acute rheumatism, he has given the superiority to large doses of the nitrate of potass, and for many years has had recourse to no other therapeutic agent in the great mass of his cases. Owing to this circumstance, during nearly three years which I passed with M. Gendrin, either as clinical clerk or house-physician, *all* the cases of acute rheumatism which came into the wards were treated by nitre, in doses varying from six to twelve or sixteen drachms in the four and twenty hours, according to the age, sex, or constitution of the patient. The number of cases which I have seen thus treated must, therefore, be great when we consider that more than two thousand patients sojourn in M. Gendrin's wards each year. Indeed, although I have kept no statistical record, I should say that I have seen treated, or treated myself, at La Pitié, in this manner, at least, seventy or eighty persons labouring under acute rheumatism.

With women we generally commenced with six drachms, rapidly increasing the quantity to eight, ten, or twelve. With men we generally began at once with an ounce, gradually increasing the dose to ten, twelve, fourteen, or sixteen drachms. In the very great proportion of cases, however, M. Gendrin did not exceed the dose of twelve drachms, or approve of its being exceeded. The salt was always administered dissolved in a large quantity of barley-water, sweetened with sugar, the proportion being about half an ounce to a pint and a half or two pints of fluid. This was the *only* beverage allowed to the patient, and taken by him as required.

In this large number of cases I do not remember once seeing any toxical symptoms produced. The secretions of the skin and kidneys were generally increased, and sometimes those of the intestinal canal, but the principal action of the nitre seemed to be a sedative action, the pulse generally falling rapidly, both as regards frequency and strength. It is, no doubt, to this sedative,

contra-stimulant action that we must look to explain its undeniable efficacy in the treatment of acute rheumatism. Although the narcotic action of nitrate of potass is generally admitted, it is but little insisted on. The experiments of Orfila, however, cannot leave a doubt on the subject in the mind of any one who has perused them; the death of the dogs to which nitre was administered being preceded by giddiness, slight convulsions, dilated pupils, insensibility, and palsy. It is only in a very few instances that I remember having seen vomiting follow the ingestion of the fluid containing the nitre, and then it was but slight, and soon ceased, without its being necessary to discontinue the use of the medicinal agent.

I do not recollect having once seen any symptoms of renal irritation or inflammation produced by these large doses of nitrate of potass, and have never heard M. Gendrin, whose experience on the subject is necessarily very great, say that he had met with such a case. M. Martin Solon, in the communication which he made last October to the Academy, on the treatment of acute rheumatism by large doses of nitre, does not mention having observed a single instance of renal affection in the thirty-three cases which he had treated by doses varying from one to two ounces. It cannot be said of these two physicians that renal affections may have presented themselves without their having perceived it, as they are both accurate and conscientious observers, and have both paid particular attention to the pathology of the kidneys. M. Martin Solon, indeed, is the author of one of the best French works on "albuminuria" which has yet appeared.

I have myself not only administered an ounce or more of nitre in the four-and-twenty hours, for many days consecutively, in acute rheumatism, but also in puerperal fever and in other inflammatory diseases, with, I think, marked benefit, and without ever observing any toxical symptom.

I believe I have said enough to prove that in the case brought before the London Medical Society by Mr. Dendy, the three or six drachms taken by the patient previous to the attack can scarcely be looked upon as the cause of inflammation or suppuration of the kidney. If he took it sufficiently diluted it would have done him no harm, and if undiluted, the stomach is the organ which would have been principally injured, and not the kidneys. As I have been induced, in thus discussing the toxical and therapeutical properties of nitre, to speak of its use in the treatment of rheumatism, I shall take an early opportunity of stating what I know on that subject. I remain, Sir, your obedient servant,

HENRY BENNET, M.D.

Cambridge-square, Hyde-park,
Jan. 28, 1844.

MR. GREENHOW ON HIS CASE OF OVARIAN OPERATION.

To the Editor of THE LANCET.

SIR,—If the report, in THE LANCET, of the discussion which took place at the Medical and Chirurgical Society, when my case of operation for the removal of a diseased ovarium was read, had not differed in words, at least, if not in substance, from that which I had previously seen in the "Medical Times," I should have requested you to copy into THE LANCET a letter of explanation which I had addressed to the Editor of that journal.

Had I been present on the occasion referred to, a few words at the time would have sufficed to remove misapprehensions which appear to have been entertained by two gentlemen who joined in the discussion; they must not, however, be permitted to go forth to the profession unnoticed.

In the last week's LANCET Mr. Bransby Cooper is reported to have said,—"With respect to Mr. Greenhow's case, he thought its history, the slight fluctuation in, and the position of the tumour, *did not justify the operation*. The nature of the tumour, as evinced in the drawings before the society, proved this to be the case; for, instead of being *transluscent*, as ovarian cysts usually were, this was of a *solid character*."

Mr. Cooper's expression, "*did not justify the operation*," is a strong one, which our hitherto limited knowledge and experience of this operation in no degree justifies; and when we reflect on the history and termination of his own case, which was read on the same evening, I cannot but feel both surprise and regret that Mr. Cooper should have been led to censure in another surgeon an operation which he had himself performed under circumstances certainly not less questionable. And on what ground does Mr. Cooper make this hasty assertion? Simply because of "the slight fluctuation in the tumour," and that "instead of being transluscent, as ovarian cysts usually were, this was of a solid character." I have nowhere seen these conditions laid down as diagnostic signs of the fitness of an ovarian tumour for extirpation, by gentlemen who have practised the operation with greater success than either Mr. Cooper or myself; and a reference to the description of ovarian tumours removed by Dr. Clay (and, I believe, others) will prove that considerable portions, at least, consisted of solid matter, very similar to that described in the case related by myself. Surely the success of Dr. Clay's cases in no degree depended on the quantity of fluid contained in the cysts.

Mr. Lawrence's remarks appear to me very judicious. Speaking of cases consisting of fluid principally, Mr. L. observes, "Now these were just the kind of cases in

which we did not require the operation. *Tapping* produced comfort in these. It is in unfavourable cases that we wished for a permanent and complete remedy;" and in his first speech Mr. Lawrence, when called upon by Mr. Cooper to give his sentiments on the operation, is reported to have said, "If there were to be found any justification for this operation it would be an expectation that its performance would relieve great suffering and prolong the life of the patient." My own case precisely comes under the category described by Mr. Lawrence. Tapping had been tried, with partial relief, and it was evidently by the removal of the tumour alone that the life of the patient could be prolonged beyond a very limited period.

Though, from the very favourable results recently published, I have been induced to perform this very formidable operation, it remains with me a very serious question how far it can be considered wise or judicious, I will not say to *recommend*, but to yield to the request of a patient to undertake its performance. More extended experience can alone settle this question in a satisfactory manner. What I have at present to contend for is only that in my case the operation was *not less admissible* than in others in which it has been successfully performed, and that Mr. Cooper has adduced no valid arguments to the contrary.

I have only to add that if Dr. Merriman had more correctly remembered the history of my case, he would not have asserted that "in Mr. Greenhow's case the presence of leucorrhœa (*which was not present*) and menorrhagia showed such a state of disease in the genital organs as would make it little likely to be relieved by operation. *The state of the uterus might and should have been ascertained before the knife was resorted to.*" The following extracts from the records of my case will show, first, that the state of the uterus was carefully examined and ascertained before the knife was resorted to; and, secondly, that the entire genital system was in a healthy condition, with the exception of the diseased ovarium, which it was the purpose of the operation to remove.

The first extract is from the short history of the patient noted down some time before the operation:—"No alteration in the condition of the os or cervix uteri can be discovered; and, as far as can be ascertained by examination per vaginam, the organ is in a natural condition."

The next extract, from the description of post-mortem appearances, will demonstrate the correctness of my diagnosis on this subject:—"The right ovarium and Fallopian tubes were healthy; that (the Fallopian tube) of the left side somewhat enlarged and vascular. The uterus was also healthy, but its cavity was lined with a fine vascular membrane resembling the decidua, which gradually disappeared towards the cervix uteri."

It will readily be believed that the result of this case has given rise to many serious reflections. I have related the details of it in the paper which Sir B. C. Brodie did me the favour to lay before the Medical and Chirurgical Society, with the utmost candour and most scrupulous exactness, from notes taken previous and subsequent to the operation, not permitting myself to alter an expression, lest I should have been tempted to represent anything in a different or more favourable light than truth required of me. I am, therefore, not a little anxious to correct misapprehensions or misrepresentations of the real facts of the case, and shall trust to your seeing the propriety of giving this communication an immediate place in your Journal. I remain, Sir, your obedient servant,

T. M. Greenhow.

Newcastle, Jan. 25, 1844.

EXTRACT

FROM THE PAPER OF

MR. RYAN ON SPERMATORRHŒA.

Treating the case according to its cause, whether arising from irritability, inflammation, atony, &c., it will be of little use to enjoin fatigue the day before, provided the person lolls a-bed in the morning. The morning orgasm being the most intense, as long as the person subject to the complaint remains an hour or so a-bed after awaking, so sure is he likely, no matter how fatigued the day before, nor how resolute his intentions, to stoop to this passion—this is the Scylla upon which he splits. *Early rising*, then, is, of all things, to be enjoined. The moment the person awakes, that moment let him get up. This is the first great step; let him master this, and much of his battle is won, as at no other part of the day is he one-tenth so exposed. There are few who must not have experienced the most intense disgust when first informed of the existence of such a practice as that of masturbation, and from this, and the practiser's consciousness of degradation in the eyes of others, if known, I should build hopes from a strong-minded friend having another bed in the same room. The presence of such a person would be a great check on the practice, and would also tend to alleviate the dejection consequent upon previous abuse. From masturbation affecting the brain and nervous system so much, spirituous liquors must be strictly prohibited, as so decidedly tending to aggravate those effects. Constipation is almost ever present in spermatorrhœa, but in the treatment it will be well to bear in mind that it is a *consequence* only. I once knew a case, in a person about nineteen

years of age, where the bowels were seldom or never moved oftener than once a fortnight, and then only after several cathartic pills, a pint of castor oil, and doses of croton oil, were administered.

May not the pathological appearances of the vasa deferentia, the "*tortuosity, irregular dilatation, and pouches*," be accounted for from the fact of those addicted to the habit of masturbation protracting the excitement as long as possible? Thus, the seminal fluid being on its passage, almost at the mouth of the ducts, and the ejaculatory muscles in trembling readiness to perform their office, such effect, for the purpose of further enjoyment, is delayed. This continues to be repeated and re-repeated until the stream of semen, ready to be expelled, is *thrown back upon itself*, filling and distending the ducts and vesiculæ. If this view of the subject be correct, it must form a material fact to bear in mind in the treatment, as it will authorise us to tell our patient, in case he cannot resist the practice, at all events not to prevent the seminal emission when first excited. There is also another thing, as regards injury to the ejaculators, to be borne in mind; the spermatic fluid being thus unnaturally kept back, still will they, expecting, as it were, the usual resistance to press upon, spasmodically contract, and then feel as it were baulked and disappointed; and there can be no doubt that their thus contracting for any length of time, without having the proper fluid to press upon, will weaken, and, finally, destroy, their great power of expulsion.

CASE OF

DISLOCATION OF THE CARPUS, BACKWARDS.

By T. Herbert Barker, Esq., M.R.C.S.E., Fellow of the Royal Med. and Chir. Soc.

Some years ago I communicated to The Lancet a case of dislocation of the carpus which had been produced by the pressure of a mangle upon the palm of the hand, whilst the forearm was in the prone position and the elbow jammed against the wall. When that case was presented to my notice I reduced the dislocation without, at first, thinking of the rarity of the injury; and it was doubted by some persons if there were not fracture of the lower extremity of the radius. Another opportunity having occurred of observing a similar dislocation, I made a most careful examination of the joint, and am induced to lay the case very briefly before your readers.

Two or three weeks ago I was called to a young man in the country, who had fallen from a height a few hours before, and was said to have "put his wrist out." There was a decided prominence on the dorsal aspect of the limb, with considerable depression above, and a corresponding prominence on the palmar surface, with a depression towards the palm of the hand. There was also shortening of the limb. The fingers were somewhat extended, and he had no power of flexing them. After very carefully examining the condition of the limb, and directing the attention of my pupil to the principal features of the case, I proceeded to the reduction, which was readily effected by extension, counter-extension, and firm pressure upon the projecting carpal bones. Thinking that fracture of the lower extremity of the radius and ulna might be detected, if present, I most cautiously had recourse to every mode of moving the ends of these bones that I could devise, but could not succeed in eliciting the slightest crepitation; so that I am certain, without more positive evidence, that no such fracture was produced, and that this was *a genuine case* of dislocation. My patient had fallen from a height of seven feet, with the palm of his hand upon a flat, hard, and unyielding surface.

Splints were placed upon each side of the wrist, and he has now the free use of the limb.

From the deformed appearance of the wrist in the above case, I should say that the skeleton figure (No. 62) in Fergusson's "System of Practical Surgery" is a very accurate representation of the state of the bones in this injury.

Although it is the opinion of Dupuytren and others that these dislocations of the carpus never occur, but that they are cases of fracture of the radius close to the joint, with more or less displacement of the hand,* I am inclined to believe to the contrary from my most careful examination of the case detailed above—*an examination especially directed to the detection of fracture.* That dislocation of the carpus backwards is of rare occurrence cannot be doubted; Sir Astley Cooper mentions but one case, that of a boy, who fell on the palm of his hand, and whose carpus was driven backward; and if my recollection serve me rightly, it was stated by Mr. Liston, some few years ago, that it had not fallen to his lot to see a real uncomplicated case of this injury.

As to the possibility of dislocation occurring without fracture, one would think that the question might be set at rest by the attention of the surgeon being particularly directed to the fact, and by a most careful examination immediately after the reduction, and as recently after the occurrence of the accident as possible. Every opportunity of dissecting such a dislocation should be eagerly embraced, as being the most satisfactory kind of evidence in well-authenticated cases. With the hope of

* See "First Lines of the Practice of Surgery," by Professor Cooper.

leading others to investigate the subject, and of inducing them to give the profession the result of their experience, I have thrown out these few observations.

Bedford, Jan. 22, 1844.

THE HOMŒOPATHIC CURE OF HÆMATEMESIS.

To the Editor of THE LANCET.

SIR,—As at the present time plausible pretensions, like the thin coating of base coin, so nearly resemble the genuine bullion of medical science that they frequently acquire a facility of currency, and are not easily detected during the rapid transmission necessary to common knowledge, you will, perhaps, permit me to make a few remarks on a case (given in THE LANCET of the 20th inst.) by Dr. Epps, purporting to be a cure of hæmatemesis by the administration of medicaments on strictly homœopathic principles. Dr. E. will, I am sure, excuse my seeking information on so important a subject as the healing art, involved as it is in "shadows, clouds, and darkness." As Shakspeare says, "the toe of the peasant approaches so near the heel of the gentleman as sorely to gall his kibes," and he who presumes to offer information on any subject connected with science is supposed to be always ready to give an answer to him that asketh. Having thus premised, I will at once plunge "in medias res."

In the case related by Dr. E. it is evident to the most superficial of observers that the practitioner of legitimate medicine in attendance previously to the doctor's ministration has played (I doubt not most unwillingly) the jackal to the lion of homœopathy; the urgency of the disease had, in fact, been so far overcome, that the *vis medicatrix* was alone (as is seen by the sequel of the case) necessary to recovery. Let us submit the symptoms described by the doctor (accurately, I doubt not, according to the Hanhemannic idea) to a superficial analysis by the aid of that "stumbling-block" to homœopathy, common sense. He found the patient present the following symptoms, taking them, *seriatim*, as they arise throughout Dr. E.'s narrative. Mark the formidable list well:—

List of Symptoms.

White cheeks; white, blanched fingers, having a swollen transparency (what is that?) about them; exhaustion; half-closed eyes; anxiety; tongue blanched, with a tint indicative of approaching typhus (I have had some small share of experience in lingual diagnosis, but I confess this description of tongue is to me "quelque chose de nouveau"); cold sweats; thirst; pain round the waist; pain at the heart; heart-sickness; pain in the head; her eyes not closed when asleep (I beg to inform the doctor on this point, that, save in feigned sleep, the cornea is rarely, if ever, completely covered by the lids); heat of forehead; pain in stomach; fulness; heat of hands; pain of back; rumbling of bowels; day restlessness; sleep, with monocular distortion, &c. &c.

Here is a goodly array—all individually and collectively referrible to the obstinate costiveness, which was at length relieved by the natural innate powers of the system; and with its disappearance at once vanished, "as things that were," the foregoing train of symptoms, hitherto allowed to proceed at "their own sweet will" (for ten days) by Dr. E.'s globuliculi. Shades of Hamilton and Abernethy where are ye!

The train of symptoms (observed through the microscopic optics of homœopathy) were, in the case of Mrs. W., evidently but the outward and visible signs of the derangement existing in the *primæ viæ*, overcome (after ten days' struggle) by the innate powers of the constitution alone, relieving the system by a copious unhealthy evacuation, in spite of China, opium, and other (antipsoric) remedies.

For the information of those who may not have seen the "Reine Arzneimittelleure," I may mention that in strict homœopathy symptoms are alone combatted, proximate causes, and those groupings of isolated symptoms from which (by analogical reasoning) we draw our notions of disease, are disregarded entirely. The above-named work contains the detail of above eighty thousand "symptoms," each having its appropriate homœopathic remedy; for instance, a globule of nux vomica causes, and, as a natural sequence, cures, about fourteen hundred of them (the "symptoms") &c. &c.

With regard to the case (well and accurately detailed as it is) I merely make a superficial running comment, leaving it to your numberless readers (non-medical and otherwise) to fill up the outline to their own individual taste. I have, however, said sufficient to "mark it" as having been an instance in which the narrator has (using his own words) "retched violently and brought up nothing;" although homœopathy may, as in the case of Dr. Gilchrist, act "liker a charm than ordinary drugs, though the dose, taken once in eight days, be not so much as an ordinary pinch of snuff." In this instance, I presume, the Genevese doctor who forms the subject of Dr. Gilchrist's "Io Pæan," was descended from him, of whom Butler thus speaks,—

"By his side a pouch he bore,
Replete with strange hermetic powder,
That wounds nine miles point blank would solder,
By skilful chemist, with great cost,
Extracted from a rotten post,
But of a heavenlier influence
Than that which mountebanks dispense,
Though by Promethean fire made,
As they do quack that drive that trade."

Here the cure was perfected by means of epistolary communication, the powder being similar to that of "pickle herring," so well described by Dr. Baynard (on Cold Baths, 1700).

Swift, in his description of the renowned and never-to-be-forgotten "University of Lagado," has (most unaccountably to me) left out the homœopathic professor, who is certainly worthy to hold a place amongst the "clariores et digniores" that figure in his account of that college. Should a similar establishment ever be founded, however worthily the other chairs of science may be filled, it will (like Aladdin's hall, minus the roc's egg) still be incomplete without the addle-egg of homœopathy,—

"Much 'will have' been done,
But more remains to do."

I have the honour to be, Sir, your obedient servant,

CHARLES T. MACKIN, M.D.

Rushall, Jan. 26, 1844.

TERMS IN PRESCRIPTIONS.

To the Editor of THE LANCET.

SIR,—Permit me, through the medium of your widely-diffused Journal, to suggest to the profession at large the advantage of uniformly employing in prescriptions the term *protochloride*, instead of *chloride*, of mercury, when calomel is meant. It may, perhaps, be replied, that the prefix *proto* is supererogatory, calomel being legitimately entitled, in chemical language, to either of the above designations. But I think the extreme danger in practice liable to attend the administration of the *bi*chloride, instead of the simple chloride of mercury, warrants our taking scrupulous pains, by our mode of diction, to prevent the probable occurrence of such an accident. Better, indeed, in writing prescriptions, to abandon scientific language altogether, and return to the old and barbarous dark-age term of *calomel*, than run the risk of giving a patient so virulent a substance as corrosive sublimate instead. Of this, however, I think there would be little likelihood (attributable to diction) were the prefix *proto* always adopted in speaking or writing of the simple chloride. Something like a precedent for such caution appears in the change long ago effected in the technical name of paregoric, now called *tinct. camph. co.*, instead of *tinct. opii camphorata*, doubtless to avoid confusing it with the plain *tinct. opii*. It will be conceded by all that a clear distinction between the two chlorides of mercury is, *at least*, as important as between the preparations above specified. I am, Sir, yours obediently,

SECURUS.

London, Jan. 22, 1844.

CHELTENHAM GENERAL HOSPITAL.

OSSIFIC DEPOSIT IN THE MITRAL VALVE.

CONGESTION OF LUNGS AND LIVER.

Reported by Mr. F. H. COLT.

H. CLIFFORD, ætat. 28, admitted May 8, 1843, under Dr. Gibney. Is a brickmaker by trade, and therefore much exposed to cold and wet. He is of a strong muscular frame, and has a well-formed chest. His illness commenced three months ago, at which time he got wet through, and neglected to change his clothes. He was then affected with a tightness across the upper part of the chest on inspiration, and spitting of blood, which lasted three weeks. The blood expectorated was of a florid red colour. He has never had an attack of acute rheumatism.

Present State.—A blowing murmur is heard on a line with the right nipple. There is great prominence of the precordial region. The impulse of the heart may be seen over the upper part of the abdomen, the epigastrium, and as far as the right hypochondrium. The head, when applied to the chest, is raised perceptibly at each pulsation. The dulness on percussion over the left side of the chest is greater than natural. The lips are rather blue. There is no swelling or pulsation of the jugulars. The pulse is quick, weak, and intermittent; two beats tolerably regular, and then three so quick as scarcely to be counted. He spits dark-coloured blood, in clots, in the morning, and starts a great deal in his sleep. The countenance is anxious, the tongue white, and the stools of a dark colour. The urine is natural. He is subject to cramps in the calves of the legs. A blister was applied to the region of the heart. Digitalis, morphia, and squills were administered internally.

17. His state is nearly the same as on his entrance. Pulse slower, impulse of the heart still very violent. On applying the hand over the liver an emphysematous crackling is felt on full inspiration. He had formerly received severe blows on the right side, and is subject to the sensation which emphysema occasions. The digitalis is discontinued, and he is bled to twelve ounces. The other medicines are continued, with the addition of pills, containing small doses of aloes and calomel.

29. Pain in the right side as before. The palpitation is worse if he attempts to sit up in bed. A blister to the back.

31. He is suffering under an attack of vomiting and purging. Omit the pills. Saline effervescing draught every two hours. There is pain in the right side of the abdo-

men, extending towards the cæcum, increased by pressure. The sickness, purging, and pain still continued in spite of the successive administration of opium, creosote, and hydrocyanic acid.

On the 4th of June the region of the heart was again examined. The rasping sound is to be heard at the apex, but not at the infraclavicular region. The second sound is remarkably clear; heart's action much the same.

9. He was taken worse suddenly yesterday evening, and now appears to be sinking fast. The lips and cheeks are purple, and the dyspnœa is very distressing. The pulse is weak and fluttering, and the skin very cold. To take brandy and water. He did not rally, and died at half-past five the same day.

Post-mortem Examination.—Muscles well developed; very little emaciation; great congestion of the veins of the face, head, neck, and upper extremities.

Heart.—The two layers of pericardium were found adherent throughout the whole extent of their surface; there was dilatation, with hypertrophy of all the cavities; the walls of the left ventricle were much thicker than natural; the semilunar valves, both of the aorta and pulmonary artery, were found healthy; the tricuspid valves were likewise healthy. On examining the mitral valves an extensive ossific deposit was found, both between their pillars and encrusting the valves themselves. The valves must have been perfectly incapacitated from acting, as the auriculo-ventricular opening was so contracted that it would with difficulty admit the end of the little finger. The orifice remaining was surrounded with walls so thickened and indurated as to be incapable of any degree of motion. The lungs were extremely congested, and more especially the right.

The *liver* was much enlarged, and presented the mottled appearance ordinarily known as "nutmeg-liver." Its appearance exactly resembled that which is delineated in the plate appended to Dr. Marshall Hall's Gulstonian lectures, and there described as the second stage of hepatic congestion.

There was a considerable quantity of serum effused into the cavity of the abdomen. No cause accounting for the emphysema was perceived.

Remarks.—The affection of the mitral valves in the case reported above was diagnosed during life. The situation to which the murmur was transmitted (to the apex) at the subsequent examinations was the reason for the formation of this diagnosis. The great dilatation and hypertrophy of the right side of the heart, bringing it into contact with the walls of the chest, explains the fact that the murmur was heard on a line with the nipple.* The pulse was likewise characteristic of an affection of the mitral valves.

The chief point of interest, however, which the case presents is, its general resemblance to that noticed by Dr. M. Hall, in his Gulstonian lectures. I allude to the manner in which it illustrates the effects of obstructed circulation in the *arrière* part of the circulation. The same successive congestion of the lungs and liver which were described in Dr. Marshall Hall's case were both present in the case reported above. The mucous membrane of the intestines was not examined, but would most probably have been found in a state of severe congestion. This supposition is rendered more probable from the fact of the patient having suffered under an attack of purging, and from his having experienced pain, increased on pressure, in the right side of the abdomen. Both these circumstances point out, at least, some irritation, if not a more severe affection of the mucous membrane, and there is no presumption against the supposition that such irritation was the effect of congestion. The affection of the liver manifested itself during life by the dark colour of the stools. Does this colour depend on congestion of the hepatic tissue? How far may we go in supposing that there is any constant relation between the two?

*** We may remark that a more or less intense degree of congestion of the liver, spleen, mesenteric veins, and lungs, similar to what was found in the above ably reported case, is invariably met with in cases of death from insufficiency of the mitral valves.

LONDON HOSPITAL.

CONCUSSION OF THE SPINE.

Robert Fletcher, a sailor, ætat. 55, admitted under Mr. Scott, July 3rd, having pitched on his spine from a distance of about sixteen feet from the ground, owing to a plank, across which he was walking, having broken. The lower extremities were entirely devoid of sensibility, and the power of voluntary movement remained only to a slight extent; there existed great pain at the lower part of the spinal column, referred principally to the immediate vicinity of the spinous process of the last lumbar vertebra; the urine was retained and the fæces passed involuntarily. After having remained undisturbed for three or four hours he was cupped, and a grain of calomel ordered to be taken every hour. Mercurial influence was, however, slowly induced, owing to the almost immediate supervention of excessive purging. The catheter was introduced three

* Dr. C. J. B. Williams.

times during each day. The urine withdrawn was highly ammoniacal.

On the third day after admission the paralysis of the extremities became complete in reference to sensibility and voluntary motion; the reflex action, though existing, could be with difficulty excited. Incontinence of urine came on, the water passing guttatim, and the diarrhœa remained unchecked, notwithstanding the omission of the mercury and the exhibition of opiates and other medicines calculated to effect that object. The system appeared hourly more enfeebled; the appetite, however, did not diminish, and he entertained a confident idea of ultimate recovery. A mild tonic course of medicine, with nutritious food, was now enjoined, but with no beneficial result.

On the 10th he complained of great pain in the perineum and hypogastrium when the bladder was distended. The urine, which had gradually increased in ammoniacal odour and density, on being withdrawn by the instrument, was highly offensive, and so mixed up with blood and puriform mucus as to give to it an opaque claret tint. On the viscus being emptied, the pain complained of during distention became more intense.

From this period to the 25th no additional symptoms existed, except that latterly he was troubled with sleepless nights and considerable sickness at intervals. The emaciation of the body had become more obvious, accompanied by entire loss of appetite, apathy, and irritative fever.

He lingered till the 27th, a period of twenty-four days from the receipt of the injury.

Inspection.—The entire surface of the abdomen tympanitic. A large ulcer had laid bare the greater portion of the sacrum. The large and small intestines distended with flatus, the former containing but a small quantity of fluid fæces. The kidneys of normal size, but much engorged. The ureters about three times their ordinary dimensions, the lining membrane being dark and vascular. The bladder contained about six ounces of dense fetid urine, intimately mixed up with blood, pus, and mucus; its mucous investment was interruptedly abraded by ulceration, but over the greater part of its extent a thick false membrane had formed, coated with a dense, whitish, irregular earthy deposit, causing it to assume a jagged and ragged aspect. The lining membrane of the urethra, also, had ulcerated at intervals, and was suffused with pus. Prostate enlarged. A careful examination did not detect the slightest fracture of the spinal column, or any relative displacement of the bodies of the vertebræ. The medulla was softened in its centre at the lower part, and a limpid fluid, tinged with blood, had been effused beneath the theca.

INJURY TO THE BRACHIAL PLEXUS CONSEQUENT ON A FALL.

William Pinko, labourer, middle-aged, with florid complexion and dark hair, admitted under Mr. Scott, Sept. 7th, complaining of great pain over the lower part of the cervical region, especially between the fifth and sixth vertebræ (in which situation a depression exists corresponding to the part occupied by the interspinous ligament), extending along either arm down to the finger's ends, increased on the slightest movement, and like a gnawing pain, as though the bones were parting. The deltoid and the other muscles of the arms act imperfectly, as also the flexors and extensors of both hands, which are incapable of voluntary closure, or the reverse, the axis of either hand forming an obtuse angle with that of the forearm, the fingers remaining in a state of partial passive flexion, and being occasionally numbed. He is unable to retain the head in the erect position, the attempt to do so causing him excruciating pain; he bends it forward upon the chest. There exists no similar affection of the lower extremities; the bladder and sphincter ani also act normally. He states that about six weeks ago (while in a fit) he fell head-foremost down stairs, about twenty feet; that he was insensible for fourteen hours; and that the above symptoms, with about the same degree of intensity, almost immediately succeeded reaction. For about five weeks he received no medical aid; a week, however, before admission, tartar-emetic ointment had been applied to the nape of the neck.

He was placed, for the space of ten days, under strict antiphlogistic treatment, which consisted in milk-diet, the daily application of twelve leeches to the back of the neck, and mercurial influence slowly established. At the end of this time he had regained perfect power over the flexors and extensors of the right hand, and he could elevate and move about the right arm without pain. The head, also, could be raised with less difficulty, but a prolonged attempt to keep it in this position was attended with material pain.

On the 18th he became irritable and restless, and could obtain but little repose at night-time. The number of leeches was diminished to six daily, and he took three grains of Dover's powder three times a day.

On the 27th he was placed on full diet, the tongue being clean and the secretions healthy.

Oct. 4. The pain in the neck having considerably abated, and also the general uneasiness, the leeches and medicine were omitted.

14. Leeches resumed. Up to this time he had been gradually regaining the power over the muscles of the left extremity.

16. He could completely close the left hand, but complained of great weakness in

it. The difficulty of keeping the head erect was now the only annoyance. Occasional blisters, and, subsequently, compound tincture of iodine, were applied to the neck, for more than three months, with but little benefit, as regarded the power of raising it. All local pain, however, had disappeared, and there remained only considerable fulness at and around the original seat of injury.

PSOAS ABSCESS.

Thomas Jones, ætat. 12, a child of clear complexion and feeble power, and presenting otherwise many characteristics of struma, admitted May 22nd, with a psoas abscess pointing in the left groin, in which situation the integument was thin, shining, and injected. It augmented in bulk in the sitting posture, decreased in the recumbent, and gave distinct impulse on coughing. The general health having become somewhat improved under a course of steel and nutritious food, a trocar was inserted into the most prominent and thinnest part of the integument, and a large quantity of unhealthy brownish-looking pus, of less consistence than natural, mixed up with flakes of fibrine, was withdrawn.

In the beginning of July (about a month after the abscess had been opened, and during which interval a sanious exudation had uninterruptedly continued from the opening made by the trocar, and still existed) compound tincture of iodine (iod., ʒj; pot. iod., ʒiss; alch. ℥iss) was ordered to be applied twice a week to the lumbar region of the spine, which was remarkably tender to the touch, and formed a very prominent angle. In about three weeks obvious improvement had resulted, the quantity of discharge having materially abated, assuming also a more healthy character. The local tenderness was much relieved.

At the end of August the original aperture in the sac of the abscess had closed, and there existed no perceptible fulness in the inguinal region. The child was entirely devoid of pain, the appetite being good and the powers of the system greater. The local treatment was continued till the middle of September, when the patient was discharged. The induration of the soft parts around the lumbar region had disappeared, ankylosis of the bodies of the vertebræ having apparently resulted.

FOREIGN DIPLOMAS.

To the Editor of THE LANCET.

SIR,—Although in a measure aware that foreign diplomas were the only credentials possessed by many styling themselves doctors in medicine in Great Britain, it was not until my arrival in Heidelberg that I was made fully acquainted with the nature and extent of the underhand traffic by means of which these worthless documents are generally obtained; and with a view of representing the credit due to many a *soi-disant* doctor, I have ventured to solicit the insertion of these lines in your Journal, which has so long and faithfully advocated the reform of the numerous abuses in the medical profession connived at by the Legislature. It has been long a matter of notoriety that several of the minor German universities, especially Erlangen, Jena, Giessen, Heidelberg, &c. whose prosperity has been impaired by changes in the political world, have, in an evil hour, been tempted, for pecuniary considerations, to lend their aid to dub men doctors in medicine who, in many cases, have shown no fitness for that distinguishing title. The candidate was generally required to transmit a cheque for 24*l.* and with it a statement from two accommodating friends expressive of his deserts for the supposed honour, and the application was forthwith acceded to. To this lax and reprehensible system succeeded an open and fraudulent sale of spurious diplomas by certain parties in England, which there are good reasons for believing was carried on to a great extent. I am informed by Professor Naegle that about two hundred forged documents, purporting to be diplomas of the University of Heidelberg, are supposed to be current in the British diminions, whereas not more than forty of our countrymen have in his recollection actually received diplomas from this university. Professor Naegle further assured me that to these forged parchments are affixed the arms of the Duchy of Baden, in lieu of those of Heidelberg University. Should these swindling transactions be proved, however ardently we may wish to see the perpetrators of the fraud brought to justice, we can hardly extend our sympathy to the dupes. Another scheme resorted to by some of these venal institutions "to raise the wind," is by the appointment of *local agents*, who doubtless procure a good per-centage for each "flat" they draw into their nets. The injury inflicted upon the medical community by these men is greater than is generally imagined; more than a single instance has come under my own notice; in Edinburgh I could mention individuals whose positions should, but does not deter them from acting in this capacity.

Partly owing to compunction on the part of some of the academical authorities in this town, but chiefly owing to remonstrance from their government, candidates for the degree are now required to attend *personally*, and submit to a specious examination. This ordeal consists in writing an answer in English to a question upon each of the usual departments of study embraced in medical education, and this is generally followed by

a *viva voce* examination. Your readers may infer how searching must be this investigation, when they are told that Professor Tiedemann is the only member of the conclave who can pretend to talk English! And I know, for a positive fact, that some of the examiners cannot understand the answers to the questions they themselves propound in writing. The examination is, then, *bonâ fide* a farce, and that I may not be supposed to be giving an unfair sketch of what some would fain make the public believe to be a rigorous investigation, I would observe that, among other sources, my information has been derived from a fellow-countryman who has recently received his diploma in Heidelberg, and so pleased is he with the liberal manner in which the honours are here distributed, that he has serious thoughts of procuring likewise a degree of doctor in divinity, so that in case he can find no bodies to physic on his return to England, he may still be so fortunate as to cure souls. These strictures, however, do not apply to all the German universities, for in Berlin, Goettingen, and Bonn, are found honourable exceptions; in these such compromise is unknown.

But another reason of some importance calls for the interference of the Legislature to protect the rights of British physicians. Throughout Germany no alien is allowed to practise, although a member of one of the medical corporate bodies of his own country; he cannot exert his skill, even on his own person, whilst in this country, as I recently found by the refusal of the pharmaceutist to prepare a prescription which I had written for my own use. Thus, the interests of the medical community are here most strictly protected, since the apothecary dare not make up a prescription without rendering himself liable to a fine, from any one who has not passed the "Staats Examen" of the province in which he lives. It is true that at the German spas English physicians are to be found who are allowed to practise among their own countrymen only, and under a special licence from the authorities, the policy of which is evident when the large sums of English money annually spent at these fashionable resorts is contemplated. While the gold-bought diplomas of Germany are tacitly allowed to place an adventurer on a par with a graduate of a British college in Great Britain, no corresponding boon is granted to the latter when in Germany. Did Germans not take our manufactures, England would not import the produce of the soil of Germany, and yet this just and almost universal law of political economy is entirely slighted in its relation to the large and educated medical community of our country.

To discuss this grievance more at length would encroach too much on your valuable space; in conclusion, therefore, I may express the hope that the projected Bill on Medical Reform, by Sir James Graham, will effectually prevent the further working of so injurious and disgraceful a system, and cause the various duties of the members of the medical profession to be so circumstantially defined that an infringement of them shall be an infraction of the law itself. I remain, Sir, your obedient servant,

EDWIN THORNE WAIT, M.R.C.S.

Heidelberg, Sept. 29, 1843.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, January 23, 1844.

JAMES COPLAND, M.D., F.R.S., in the chair.

Case of Phlegmasia Dolens and Synovitis. By THOMAS MAYO, M.D., F.R.S., &c.

THE train of symptoms described in this case commenced about five weeks after delivery, in a healthy female, aged twenty-four, whose lochia, after the delivery, had been nearly suppressed. The first symptom was lameness, for which she was placed in the surgical wards of the St. Marylebone Infirmary. Abscess at the knee then was observed; the thigh swelled, and phlebitis of the femoral vein was next noticed. The phlebitis was subdued by antiphlogistic treatment, and the knee freely punctured, with much discharge of pus, and subsidence of pain and fulness. Inflammatory cerebral disease next became manifest, and on this yielding to depletion, moderately performed, a painful and highly-congested state of the conjunctiva ensued.

Hemiplegia now occurred, with very defective articulation. Of this class of symptoms the first set yielded rapidly to remedies, the latter is still, in some degree, present. Strychnia seemed now to benefit the patient.

Throughout this illness the presence of a hysterical diathesis was highly observable. The author takes occasion to notice that this fact, coupled with the varying and protean nature of the symptoms, might have seemed to justify the practice appropriate to hysteria, but for the presence of well-marked inflammatory symptoms; and he draws some practical inferences from this consideration, as to the means of preventing such mistakes.

Dr. COPLAND considered the case to be interesting, from the occurrence of synovitis previous to the phlegmasia dolens. It was by no means uncommon for synovitis to follow, but very rare for it to precede that disease. With respect to inflammation of the brain coming on after the phlegmasia dolens, it was, no doubt, a curious circumstance, but he had, at the present time, a case illustrative of this fact under his care.

Dr. G. Burrows inquired the condition of the knee joint before and after the evacuation of the pus.

Dr. Mayo replied, that the patient had been originally in the surgeon's ward for what appeared to be lameness. Immediately after the opening of the joint the redness, heat, and other evident symptoms of inflammation, rapidly subsided, and in a few days the joint became quite normal. It was afterwards examined, and nothing wrong could be detected in it. On the knee-joint becoming enlarged the vein, hardened and cord-like, could be detected; this state soon subsided when the joint was opened. He thought the interest of the case consisted in the rapidity with which one set of symptoms came on as another set subsided. If, indeed, the inflammation in the knee-joint had not been so distinct, the tenderness and enlargement might have been thought to be hysterical. At first the irritation of the brain resembled that connected with hysteria, but distinct cerebritis soon presented itself.

Dr. George Burrows considered the society indebted to Dr. Mayo for the detail of the case, particularly as it illustrated the occurrence of synovitis previous to the setting in of the phlegmasia dolens, a very uncommon circumstance. He had a case, however, last summer, under his care, in which this deviation from the usual course of things occurred. The subject of the case was a youth, nineteen years of age, who was admitted into St. Bartholomew's Hospital with severe pains in the left ankle and knee, attended with severe pyrexia. It appeared that five days previously, having been fatigued by walking, he threw himself down on the grass in the park. On getting up he felt chilly, and this sensation continued until he got home. In the evening he suffered from severe pain in the left ankle, knee, and groin. With these symptoms, accompanied by considerable fever, he was admitted into the hospital. The disease was thought to be rheumatic fever, and he was depleted, and calomel and opium, with salines, were administered. These means, conjoined with low diet and confinement, soon succeeded in relieving the pains and inflammation, but in the course of a day or two the left knee became swollen, and there was distinct fluctuation in it. In the course of a few days the veins of the right hip, thigh, and, indeed, of the entire right lower extremity, became inflamed; in fact, all the usual symptoms of phlegmasia dolens presented themselves. The other extremity was afterwards similarly affected. Local depletion, poultices, mercurial frictions, and calomel and opium, with attention to the bowels, with the after-administration of Dover's powder, removed those symptoms. Pain and redness of the right testicle and shoulder came on, and were followed by hectic fever, which required the exhibition of quinine, and the employment of nourishing diet. Abscesses subsequently formed in the left groin, but the patient recovered sufficiently to go into the country, where his health became established. This case illustrated the occurrence of synovitis several days previous to the setting in of phlegmasia dolens, which occurred first in one extremity and then in another, the patient being a male, and the disease resulting from cold. This and Dr. Mayo's case illustrated the peculiar sympathy which evidently existed between the internal lining of veins and synovitis, in accordance with what we knew to be the case with regard to synovial membranes and the inner lining of the heart, as exemplified in cases in which rheumatism produced endocarditis. We were aware of the fact, the explanation of it was difficult.

Dr. Robert Lee stated that several cases had been recorded similar to that related to the society by Dr. Burrows, in which, from exposure of the lower extremities to cold, inflammation was excited in the branches of the saphena veins, which inflammation extended upwards, along the trunks of these vessels, to the femoral veins, and produced in men all the phenomena of crural phlebitis, or plegmasia dolens. The late Lord Liverpool had inflammation of the left saphena veins, induced by exposure of the feet and legs, when dressed in thin silk stockings, to a current of cold air, which passed through an open window, while attending a crowded levee. The inflammation extended upwards to the groin, and phlegmasia dolens of the whole left lower extremity took place. Lord Liverpool recovered from this disease, but died some years afterwards from an organic affection of the brain; and Sir Astley Cooper, who made the post-mortem examination, found the left iliac and femoral veins were completely impervious. Sir Astley gave him (Dr. Lee) an opportunity of examining the preparation of the diseased veins, and he found that they had undergone precisely the same change of structure which he had observed in those women who had died several years after having suffered from phlegmasia dolens. Dr. Graves, of Dublin, had related the case of a young man who was employed for two successive days working in a ditch, and who was consequently obliged to stand in water, above his knees, during that time. Soon after he was seized with fever and severe pain in the right thigh, which became swollen. Typhoid symptoms supervened, and he died on the eleventh day after the attack. The lining membrane of the external iliac vein was inflamed, and also the lower part of the vena cava, and a large friable concretion adhered to the inner surface of these vessels. He (Dr. Lee) saw a gentleman about fifteen years ago, who had received a blow on his right shin, immediately over a branch of the

saphena vein, by a small piece of timber accidentally falling upon it. Pain in the direction of the upper part of the saphena vein followed, and the whole leg and thigh soon became enlarged, as in phlegmasia dolens. He had seen the same effect repeatedly produced, both in men and women, by chronic ulcers over the tibia, with varicose veins of the legs; and in some pregnant women, without ulceration, he had seen varicose veins in the latter months become inflamed after delivery, and a local or partial phlegmasia dolens on the inner part of the leg and thigh supervene. In one case the inflammation of the saphena veins, excited in this way, reached the femoral vein, and the whole limb became affected with phlegmasia dolens. In men crural phlebitis might be produced in another way, by the excitement of inflammation in any of the veins within the pelvis which terminated in the internal iliac or hypogastric veins. In two cases related by Mr. Holberton, ulcers of the rectum, in men who died of tubercular phthisis, produced inflammation of the hæmorrhoidal veins, which extended to the internal common and external iliac and femoral veins. He (Dr. Lee) traced the inflamed hæmorrhoidal veins to the ulcerations of the mucous membrane in the recent parts. Mr. Lawrence examined the body of a man who died of cancer of the rectum, and he found the iliac veins inflamed and obstructed. The introduction of a sound or catheter into the bladder had excited inflammation in the vesical or prostatic veins, with a similar result. But in puerperal women, as he (Dr. Lee) had first stated to the society in 1829, crural phlebitis usually commenced in the uterine branches of the internal iliac or hypogastric veins, and subsequently extended from them into the common external iliac and femoral veins of the side affected. He had, since that time, enjoyed so many opportunities of confirming by actual dissection the correctness of this view of the origin of phlegmasia dolens, that he was as firmly persuaded of its truth as he was of any fact in pathology. The frequent occurrence of phlegmasia dolens during the progress of malignant diseases of the uterus, in which crural phlebitis had been distinctly traced after death to its commencement in the veins of the cervix uteri, further corroborated the truth of what was first stated here fourteen years ago. He had no doubt that the case now read to the society by Dr. Mayo was originally a case of uterine phlebitis. If the condition of the patient had been carefully observed during the five weeks which elapsed from the period of her delivery to the time when she came under Dr. Mayo's care, it was highly probable that some of the characteristic symptoms of chronic uterine phlebitis would have been noticed, viz., acceleration of the pulse, irregular paroxysms of fever, more or less derangement of the nervous system and digestive organs, sallowness of complexion, and general debility. The disturbed state of the brain, the inflammation of the eyes, and the suppuration in the knee-joint, described so fully by Dr. Mayo, were the complications most frequently observed in uterine phlebitis, and he believed they all arose from this cause. It was now sufficiently well known that all the remote organs of the body were liable to suffer violent derangement in cases of uterine phlebitis. Sometimes the lungs were attacked with fatal inflammation and gangrene, or the coats of the eyes were rapidly disorganised; deposits of pus took place in the cellular membrane, and among the muscles in different parts of the body, particularly around the joints—the elbow, knee, wrist, and ankle-joints; the cartilages of the joints themselves had been affected and destroyed by ulceration. Large portions of the integuments of the extremities had been suddenly attacked with gangrene, in other cases of uterine phlebitis, where the lungs, eyes, joints, and cellular membrane had escaped. In these cases the symptoms had resembled somewhat those of typhus fever; there had been rapid, feeble pulse, delirium, severe nervous tremors; the teeth and tongue had been covered with black sordes, and there had been vomiting and diarrhœa. The connection between inflammation of the uterine veins, and the other varieties of uterine inflammation, and these constitutional symptoms, was now completely established; but it might be explained in different ways, and he was satisfied that the intimate part of the process required further investigation. There could be no doubt that these secondary affections did occur in the progress of cases of uterine inflammation, where the veins and absorbents had not been inflamed, and where there had been no purulent fluid contained in these vessels. He had repeatedly seen these destructive affections of the lungs, and other remote organs, where the muscular coat and lining membrane of the uterus were softened by inflammation, and where the vascular system of the organ was in a perfectly healthy state. Dr. Mayo had attributed to him an opinion respecting the cause of uterine phlebitis which he did not entertain, viz., that the disease was produced by absorption of the secretions from the cavity of the uterus after delivery. There was no proof of this, nor was there any evidence of puerperal fever ever being excited by the absorption of fluids from the inner surface of the uterus and contamination of the mass of blood. Even in cases of retained placenta it was impossible to prove that the constitutional symptoms were produced by absorption of putrid matters from the interior of the uterus. The effects produced upon the brain and other organs in all these cases were obviously referrible, in some degree, if not

entirely, to nervous sympathy with the uterus. We had here all the conditions present in the uterus in the most marked manner, to produce, through the medium of the nervous system, by reflex action, these violent effects upon the remote organs of the body.

Mr. SOLLY inquired what evidence there was that the knee-joint had suppurated in this case. It was certainly curious, if it were so, that it should recover entirely its normal state in four or five days. This circumstance induced him to believe that the inflammation and suppuration must have been external to the joint. He detailed a case of phlebitis in the male, affecting one leg, and resulting from exposure to cold. He had seen cases of this disease in unmarried females.

Dr. MAYO replied that the signs of inflammation of the joint, in his case, were the smoothness, redness, tenderness, and globular character of the swelling, conjoined with the depth to which the puncture to evacuate the fluid was obliged to be made. He had no doubt but the joint itself was inflamed. The real peculiarity of the case under discussion, was the rapidity with which one set of symptoms gave way, and were followed by another. He thought, in opposition to Dr. Lee, that the phlegmasia dolens commenced with the knee affection, and that the general health, if disordered before, would have been noticed by those in attendance. The woman was strong and healthy in constitution, and suckled two children. This latter circumstance would probably have the effect of keeping down inflammatory action. He apologised for mistaking Dr. Lee with respect to absorption in the production of phlegmasia dolens.

Mr. SOLLY observed that Dr. Mayo's description of the knee affection proved that the suppuration was external to the joint. Had the joint itself been affected, the tumour would not have been round, and there would have been on each side a sulcus marking the situation of the ligaments.

Dr. MURPHY suggested that as the woman was hysterical, and suckled two infants, the head affection might have resulted from that cause.

Mr. DAVIS had found that phlegmasia dolens usually affected leucophlegmatic females, and those of a hysterical habit. It was sometimes short, sometimes long in its duration. He had seen a case like that detailed by Dr. Burrows, following scarlet fever. In females he had found local bleeding of service; general bleeding he had not employed.

Account of a Horn developed from the Human Skin, with observations on the Pathology of certain Disorders of the Sebaceous Organs. By ERASMUS WILSON, Esq.

Investigating the pathology of the sebaceous organs, the author observed that several disorders of these organs were due to alteration in the qualities of the sebaceous secretion. This secretion is separated from the blood through the agency of the cells formed upon the internal surface of the glands, and contains, among other substances, an albuminous fluid and calcareous salts. When the albumen is in larger proportion than natural the cells retain their distended form, and, by accumulation, produce those small tumours which are termed molluscum contagiosum. When the calcareous matter is in excess, and remains in the flattened cell, the accumulation of these cells constitutes the calcareous sebaceous tumours. In other cases, the sebaceous cells, from torpidity of the skin, accumulate in considerable quantity, and gave rise to small sebaceous tumours. The peculiar pathological character of these tumours is their laminated texture, and the identity of structure of their contents with epidermis, most, if not all, of the peculiar constituents of sebaceous substance being absent. When the contents of such a tumour as this are extruded from the mouth of the follicle, and become desiccated, they form a hard, laminated, semi-transparent mass, identical with horn. A horn of this kind was removed by the author from the thigh of an aged female; it had been some years in growing; it was two inches and three-quarters in length, by two inches in greatest breadth. The horn was laminated longitudinally, and towards the apex was split in the direction of the laminæ. In minute structure it was composed of flattened epithelial cell, closely condensed, and in some parts having a fibrous arrangement. The cells measured in length 1-500th, and in breadth 1-650th of an inch, average dimensions. Chemical analysis of horn shows it to consist of albumen, mucus, phosphate of lime, chloride of sodium, and lactate of soda. The author has collected ninety cases of horn, the majority of which occurred in the female subject. Among the older writers, horn was a subject of curious speculation. Rhodius met with a Benedictine monk, who had a pair of horns, and was addicted to rumination; and Fabricius, having seen a man with a horn growing from his forehead, whose son ruminated, attributed the peculiarity of the latter to the ruminant character of the former. The most remarkable case of horn on record, is that of a Mexican porter, in whom the horn was fourteen inches in circumference around its shaft, and divided into three branches. The author concluded by adverting to the authors on this subject, among whom are Vicdazyr, Everard Home, Alibert, Rudolphi, Cruveilhier, Astley Cooper, and Travers.

Mr. KING thought pathologists had been pretty well aware that human horns were morbid products of natural glands. There is in the museum of Guy's Hospital a coni-

cal hollow horn, taken from a sheep's back, about as large as a breakfast teacup, based on, and half filled by, a fleshy, vascular, bleeding fungus. The apex is formed within of a solid, soft, fibrous horn, and the horny exterior is thin, and much divided into scales or imbrications. The whole gives the idea of a compact series of columns growing up from the convex surface of a great follicle turned inside out. With respect to the ossification, or rather fossilisation, of some cutaneous cysts, he thought it more analogous to the changes which dead matter may slowly undergo when shut up in any part of the body, as when strumous matter dries up and becomes earthy in the lungs or absorbent glands; when fibrin becomes centrically bony in a vein, or a serous cavity, or when a dead hydatid or closed abscess ossifies. Ossified arteries and heart, and even serous membrane itself, and fibrous tumour, seem scarcely different physiologically.

The next meeting of the society will be held on the 13th February.

MEDICAL SOCIETY OF LONDON.

Monday, January 29, 1844.

Mr. PILCHER, President.

PREVALENT DISEASES.

Dr. CLUTTERBUCK made some remarks on the great prevalence, at the present time, of inflammatory disorders generally, whether of the chest, as developed in the form of what was denominated "influenza," which, however, he believed to involve the nervous system, chiefly the brain, as well as the mucous membrane of the air-passages, or of chronic or acute brain affections, or apoplexy and paralysis. Sudden deaths had of late been very common, and these, he thought, were dependant in most cases upon apoplexy. Insanity, in his practice, had also been more than usually prevalent. This he regarded also as an inflammatory disease. The chief object, however, of the speaker, was to point out what, in his experience, was the most advisable plan of proceeding in these cases. He regarded the mere temporary depression which usually occurred, as no good reason against the moderate abstraction of blood, and the employment of general antiphlogistic treatment. He thought this depression often led the practitioner to fear blood-letting in a moderate degree, when, in fact, that remedy would shorten the disease, relieve the symptoms, and renovate the system. Due regard having been had to the habits and condition of the patient, he had never hesitated to resort to moderate depletion. In insanity he followed the same rule of practice, and whilst he deprecated the use of blisters, and all kinds of stimulants, as not only useless, but positively injurious, he eulogised the employment of "necessary restraint," the abstraction of all excitement, the use of simple regimen, the administration of cathartics, bathing the head with cold water, and the moderate abstraction of blood. He related a case to show the efficacy of this plan of proceeding.

Some discussion took place on the case of abdominal tumour related at the last meeting, but nothing novel was elicited.

Dr. G. BIRD stated that he had lately met with two or three cases of common continued fever, marked by the peculiarities distinguishing the affection as it had lately prevailed at Glasgow, and more recently at Edinburgh. The disease in question came on with all the symptoms of common continued fever; the patient, in the course of a few days, became suddenly convalescent, the tongue becoming clean, and the appetite returning. In a day or two, and without any apparent cause, all the symptoms returned, with increased severity, and accompanied by excruciating pain in the joints, similar to that of rheumatism, but without any of the external characteristics of that affection. From this condition the patient usually recovered in a few days. Cases of this description had lately occurred in Guy's Hospital, under the care of Dr. Hughes and of himself.

Dr. T. THOMSON had found that inflammatory affections of the chest, in children, had been more frequent in October and November last, than at the present time, and required more active treatment than usual.

Dr. WILLSHIRE had found, within the last few days, that diarrhœa was remarkably prevalent among children; and Mr. DENDY related a case, in which a child, seized with diarrhœa, was, in a few hours after, attacked with such acute pneumonia that he had seldom witnessed so severe a case. It appeared to baffle all remedies.

Monday, February 5, 1844.

The proceedings of the evening were of a very desultory character.

Dr. F. BIRD exhibited a morbid specimen, taken from a patient from whom he had removed an ovarian tumour. Previous to operation a most careful examination of the tumour was made, chiefly with respect to its fluctuation. Fourteen medical men of eminence examined it, and all agreed that it contained fluid, the fluctuation from the ensiform cartilage to the pubes being so unequivocal and distinct. On opening the tumour, after its removal, the contents of the sac, which weighed thirty five pounds, were found to consist of a jelly-like substance, precisely similar to that named by the French *matière colloide*. This had been examined by Dr. G. Bird and others, with the microscope, and found to consist of cells similar to those which constituted malignant disease. The healthy appearance of the patient, and her

age (33), did not lead to the conclusion that the formation was malignant, and although she had a small moveable tumour in one of the mammæ, this was thought to be of no importance. The ovarian tumour had only commenced about eleven months since.

We reserve the debate on this case, in its present imperfect form, as it will shortly be brought before the society in full detail, and it will then appear in the pages of THE LANCET.

A case was related of uterine disease, in which, however, no vaginal examination had been made. Of course, in the absence of this very necessary aid in the diagnosis, the speculations as to its real nature were very vague and unsatisfactory.

Dr. THEOPHILUS THOMPSON stated that he had found the most effectual mode of relieving the inconvenience and pain arising from chilblains, to consist of drawing a stick of nitrate of silver over their surface, previously moistened with a little water. It would appear that the caustic acted on the sentient extremities of the nerves, and produced relief.

WESTMINSTER MEDICAL SOCIETY.

Saturday, February 3, 1844.

Mr. FISHER, President.

SWALLOWING A BLISTER.

Dr. W. MERRIMAN detailed the case of a child, lately under his care, who, in consequence of having been allowed to eat various indigestible articles, such as split-peas, &c., became affected with severe diarrhœa, attended with considerable fever and brain affection. To relieve this condition it was found necessary to give considerable quantities of calomel. The symptoms gave way, but those of hydrocephalus began to manifest themselves. With the view of combatting these, more calomel was administered, and a blister, about the size of the palm of the hand, spread on the common adhesive plaster, was placed on the nape of the neck. The blister drew well, but, to the consternation of the parents of the child, it could nowhere be found the next morning, and as they asserted that they had heard the child making a noise with its mouth during the night, as if masticating some sticky substance, and as the mouth and throat were blistered throughout their entire extent, as far as could be seen, and there was a thin mucous discharge from them, it was concluded that the child had actually swallowed the blister. The state of partial coma under which the little patient laboured served to mask the real effects, if any, of the drug, for certainly there was no strangury, no sickness, and only some tenderness by exerting pressure over the region of the stomach. A mixture, containing olive oil and manna, was exhibited, and the patient died in about forty-eight hours after swallowing the plaster. It was not, however, thought that the blister had shortened life, as the illness had lasted altogether eleven days. Unfortunately, permission could be obtained to examine the head only, and the condition of the stomach and intestines, and the certainty of the entire blister being swallowed, remains questionable. Nevertheless, taking all the circumstances into consideration, the medical attendants had no doubt whatever that the blister had been really taken into the stomach, and they considered the case remarkable, from all the usual symptoms of poisoning by cantharides being absent.

Mr. SNOW related the case of an old woman, who scraped down about a drachm of dry blistering-plaster with her chocolate, in mistake, and swallowed the whole when boiled down. Symptoms of most violent strangury, accompanied by severe pain and bloody urine, came on, but these were removed in a day or two by the employment of demulcents. Blistering plaster did not lose its power after application to the skin, as one blister was made by some practitioners to serve several patients.

With respect to the quantity of cantharides which could be taken internally without producing poisonous effects, Dr. CHOWNE related a case, in which he had gradually increased the dose of the tincture of lytta, until he gave six drachms of it in the course of a day. The case was one of leucorrhœa, in which disease he had found great advantage from the employment of this medicine.

The PRESIDENT drew attention to the mischiefs occasionally resulting from the long-continued application of blisters to young children, and inquired of members what was the average time they kept them on?

Dr. CHOWNE never employed them if he could possibly avoid it. Mr. SNOW allowed them to remain on three or four hours, and applied a poultice to the part. Mr. MARSON removed them at the end of three hours, whether vesication had occurred or not. Mr. CLARKE never allowed them to remain on children, under four years of age, for more than two hours; and Mr. TOTHILL, lately resident surgeon of the Metropolitan Hospital for Children, never saw any bad results follow their application, for spaces varying according to age, from three, four, to five hours.

ANOMALOUS CASE.

Mr. BARNARD HOLT stated the following case:—A young gentleman, about twenty-two years of age, was four months since attacked with gonorrhœa, which went through the usual stages, and lasted the usual period. Inflammation of the testicle supervened on the cessation of the discharge, but was subdued by leeching, the use of tartar-emetic, and the common remedies, the dis-

charge, in the form of gleet, coming on as the inflammation subsided. He was then well, with the exception of a gleet. Three days afterwards he felt chilly when out, and on returning home in the evening was seized with a shivering fit, of which he took little notice, and went out as usual the following day. The shivering returned at the same hour, and was followed by great heat, and afterwards by profuse sweating. This attack, of what appeared to be decided ague, occurred every day at the same hour. The medical attendant of the family was consulted at the end of three or four days. He considered the case to be one of ague, and treated it with quinine and arsenic without effect. In three days more unequivocal symptoms of inflammation of the left lung came on, for which he was bled and blistered, with complete relief to the pneumonia, but leaving the aguish symptoms, which had continued during the inflammatory attack as severe as before. A physician of eminence was consulted,—he took the same view of the case as the practitioner in attendance, and advised perseverance in the same remedies, together and separate, and in augmented doses. The disease, however, showed no signs of giving way, but, on the contrary, the attack came on twice in the twenty-four hours, viz., at twelve, p.m., and twelve, a.m. The shivering fit was preceded by yawning and a sensation of coldness down the back; the cold stage lasted two hours, the hot stage one hour and a half; and the subsequent sweating was so profuse as to penetrate through the feather-bed to the mattrass; and on one occasion as much as a pint and a half of perspirable fluid was collected from the night-shirt, &c. Sleep followed the sweating stage. The after-history of the case was of a melancholy character in regard to the complaint. Other opinions were sought and obtained, and every kind of remedy that art could suggest was employed. It was still considered to be ague, but emetics, change of air, opium and morphia, preparations of zinc and iron, and immense doses of quinine, among other remedies, failed in affording even transient relief. Careful examinations had been made of the urinary organs and the chest, but nothing but consolidation of the upper part of the right lung could be detected. There was a distressing cough during the hot stage but no pain on expectoration. Five days since slight expectoration came on, not of a purulent character, but at first frothy, and then somewhat muco-purulent, tenacious, and slightly streaked with blood, as if the sputa were brought up with difficulty. This expectoration lasted for three days, and curiously enough, during that period, no attack of ague or of fever occurred. The expectoration ceased at the end of two days, and then the aguish attacks recurred as frequent and as severe as ever, and thus, at the termination of nearly four months, there was no alleviation whatever of these formidable attacks. Looking at all these circumstances, and taking into consideration the fact that ague was commonly amenable to treatment within a short period of time; that this patient had never been in a marshy district, but had lived for eleven years past in the Regent's-park, the narrator of the case was inclined to the opinion that the periodic attacks were the result of formation of matter, probably in the substance of the lung, the evidence of which, as was well known, was occasionally so obscure as not to be discoverable during life. Looking, also, at the beneficial effect which followed the expectoration, he should be inclined to make an artificial drain, such as a seton, upon the chest.

A debate of some length followed, which our want of space will not allow us to give in detail. It may be summed up as follows. In support of the opinion entertained by those in attendance on the case it was contended that ague was not always amenable to treatment, and that instances of its having proved fatal, without complication with organic disease, had been known to occur in the marshy districts.

Dr. Crowne had seen such cases in Lincolnshire. Marsh miasma was not essential as a cause in the production of ague, as had been proved by the experience of many. Cases in point were cited by the President and Mr. Marson. Had the shiverings been the result of the formation of matter they would not have been of a periodic character, such periodicity being contrary to all experience in such a case. In the case under discussion it was also known to Mr. Chance that the patient's place of business was on the banks of the Thames, that he was a boater, frequently got wet through, was much exposed to the weather, and very probably to the influence of marsh miasm.

BRITISH MEDICAL ASSOCIATION.

Jan. 30, 1844.

Dr. Webster, President, in the chair.

THE NEW CHARTER—THE POOR-LAW COMMISSIONERS AND MEDICAL OFFICERS OF UNIONS.

The minutes of the last meeting were read and confirmed.

William Gradwell, Esq., Kirkham, near Preston, Lancashire, was unanimously elected a member of the association.

This being the first meeting of the council since the promulgation of the Charter of the Royal College of Surgeons of England, a discussion took place on its clauses and its provisions, and the following resolution was unanimously adopted, on the motion of Henry Smith, Esq., seconded by Edward Evans, Esq.,—"That the council view with regret and alarm the granting of a new char-

ter to the Royal College of Surgeons, as prejudging the question of medical reform, and as subversive of the privileges of its members; and after the numerous petitions presented to the Queen and both houses of Parliament to first take into consideration the whole question, they cannot but reprobate the indecent haste which had been exhibited by the advisers of the Crown."

After the question of "the charter" had been adjourned to a future day, the following correspondence with the poor-law commissioners was laid before the council:—

"Dulwich, Jan. 6, 1844.

"Gentlemen,—At the two last meetings with which you favoured the British Medical Association, the deputation drew your particular attention to what they considered an injustice connected with your medical order of March, 1842.

"I allude to the qualifications of medical officers to the unions, and the virtual exclusion of members of the Royal Colleges of Surgeons in Scotland and Ireland, upon the plea that none but members of the College of Surgeons in London could be appointed, because the Poor-law Amendment Act was an English act, and only applicable to England and Wales.

"I need not repeat the arguments which the deputation used (and as they thought successfully) against such an extraordinary interpretation there given, I believe (or at least promulgated) for the first time, by your law advisers, and which you stated you felt yourselves bound to act upon; the deputation protested against such a decision, and appealed to Government and the Legislature. Since that time I understand that the opinion of the law-officers of the Crown has been taken on the subject, but having seen no official account of such opinion, and fearing to trust to newspaper or other paragraphs, you would much oblige me by favouring me with a copy or summary of the opinion. I am, Gentlemen, your faithful and obedient servant,

"Geo. Webster.

"To the Poor-law Commissioners, &c. &c. Somerset-House."

"Poor-law Commission-Office, Somerset-House, Jan. 19, 1844.

"Sir,—I am directed by the poor-law commissioners to acknowledge the receipt of your letter of the 16th inst., and to forward to you, as you request, a copy of the opinion of the Attorney-general and another counsel, on the competency of medical practitioners, possessing Scotch and Irish qualifications, to act as officers in an union or parish under the Poor-law Amendment Act. I am, Sir, your most obedient servant,

"E. Chadwick, Secretary.

"To G. Webster, Esq., M.D., Dulwich."

"Opinion.

"We are of opinion that so far as the question of *surgery* is concerned, those persons who have a *surgical* diploma, or degree, from a royal college or university in Scotland or Ireland, are (in point of law) as competent to be appointed and to act as medical officers under the statute referred to as the persons who have the diploma of the Royal College of Surgeons in London.

"With respect to *pharmacy* the right to practise (in England and Wales) is confined to those who have the licence or certificate of the Apothecaries' Company, and other persons whose rights are saved by the Apothecaries' Act; and in our opinion persons having Scotch and Irish *medical* degrees are *not* among such last-named persons.

(Signed)

"Fred. Pollock,
"Samuel Martin.

"Temple, Aug. 8, 1843."

On further discussing matters connected with the Poor-law Amendment Act, it was unanimously resolved "That a deputation, consisting of the following gentlemen—Dr. Webster, president, George Bottomley, Esq., Edward Evans, Esq., Charles Brady, Esq., R. D. Grainger, Esq., R. L. Hooper, Esq., and William Eales, Esq.——should be appointed to wait on Lord Ashley on the subject of his proposed inquiry in the House of Commons into the medical department of the Poor-law Amendment Act.* The following letter was read from Sir J. Graham:—

"Whitehall, Jan. 22, 1844.

"Sir,—I am directed by Sir James Graham to inform you that he probably will introduce a Bill during the ensuing session of Parliament, of the nature mentioned in your letter of the 19th inst., but it is not in his power to say exactly when that may be. I am, Sir, your obedient servant,

"D. O'Brien, Priv. Sec.

"To Geo. Webster, Esq., M.D."

Some letters were read on the subject of remuneration to medical men for certificates of health to insurance-offices, from one of which the following is an extract:—"I have enclosed some applications from life insurance-offices for statements of the health, &c. of some of my patients, to which I have returned the usual answer. You will see that the 'Metropolitan' addressed a letter to me, stating that they did not think it right to give a fee, as they paid their own medical man, to which I answered that they might be content, then, with *their own medical man's* opinion."

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* Any information as to facts and grievances on this subject may be addressed to the secretary, Exeter-Hall, Strand.

Two sums of five guineas each having been voted to the widows of medical men (formerly belonging to the association) from the Benevolent Fund, the meeting adjourned.

Diseases of the Lungs from Mechanical Causes, and Inquiries into the Condition of the Artizans exposed to the Inhalation of Dust. By G. Calvert Holland, M.D., Physician Extraordinary to the Sheffield General Infirmary, &c. London: John Churchill. 1843. 8vo. Pp. 100.

Dr. Holland is an able and experienced writer, whose name has long been familiar to the medical public. It was, therefore, with some curiosity that we opened his work on the mechanical causes of pulmonary disease, as we felt certain that a man of his great medical knowledge and sagacity, located as he has long been in the very centre of one of our large manufacturing districts, could not fail to throw great light on the interesting point of hygiene and pathology which he had undertaken to elucidate. Nor were we disappointed in this respect. Dr. Holland's searching and elaborate account of the morbid and hygienic state of the workmen who are exposed to the inhalation of the metallic and petrous dust created during their grinding operations, is the most complete and the most practical we have ever read. Although, however, we accept all the *valuable facts* contained in the work we are reviewing, we are sorry to say that we cannot accept as equally demonstrated all the pathological inferences drawn from those facts.

Dr. Holland's treatise may be divided into three sections. The first contains several chapters, which are thus headed: circumstances in which the workmen who grind are placed; the action of the inhaled noxious particles on the respiratory organs; the modifications in the character of phthisis from a difference in the circumstances in which it occurs; the symptoms of the disease; the pathology of the disease. The second section is devoted to a consideration of the remedies to be employed in the treatment of the disease. In the third section are examined the physical and mental condition of the artisans. We will now follow Dr. Holland in each of these divisions of his work.

Sheffield, the great emporium for cutlery and hardware, is the field in which Dr. Holland has prosecuted his researches, and his position as physician to the infirmary for the last eleven years has afforded him peculiar faculties. In Sheffield dry and wet grinding are carried on most extensively in the manufacturing of scissors, forks, needles, razors, penknives, table-knives, saws, files, scythes, &c. It appears that formerly all the grinding was done by water-power, and by the wet process. Since the introduction of steam-power the grinding wheels are mostly worked by that means, and dry grinding is resorted to in the manufacturing of all the above articles, as the most expeditious plan, excepting, however, in that of the three last enumerated, viz., saws, files, and scythes. Wet grinding is comparatively innocuous, the dusty particles separated from the stone on the one hand, and the metal on the other, being at once formed into a sort of paste by the water. But it is far from being so with the dry grinding; it produces an impalpable dust, partly stony and partly metallic, which is inevitably inhaled in great quantities by the workman who is standing more or less bent over his wheel. That the inhalation of this dust is injurious to the health and longevity of man has long been known, but Dr. Holland's researches have enabled him to show, more forcibly than has hitherto been done, the direful effects which the continued breathing an atmosphere loaded with such particles produces on the human frame. The account which he gives of its influence on the duration of life is really awful, tending to prove, as we shall hereafter show, that all or nearly all those who are engaged in dry grinding, become in a few years a prey to pulmonary diseases of the most distressing kind, and eventually die long before they have attained the age of mature manhood.

We have read attentively all the pathological details into which the author enters, and endeavoured correctly to appreciate his views, with reference to the *nature of the disease* occasioned by the above causes. This, however, is not very easy, as there seems to be a little confusion in his own mind on this subject. If, however, we correctly interpret his ideas, we should say that he looks upon pulmonary or tubercular phthisis as *the disease* generated by the chronic irritation which the inhalation of dust produces, but that he also admits that it may give rise to other important changes, viz., *enlargement of the bronchial tubes, and*

expansion of the pulmonary tissue (page 12), and that these structural changes may either exist without tuberculisation of the lungs, or appear as the forerunner of tuberculisation. He likewise adds that these changes have never been observed by any other author. In order to show that we are faithfully reproducing Dr. Holland's opinions, we will give the following extracts :—

"Whatever may be the cause of tubercles, they are found in numerous cases in the lungs of grinders, *and can be traced to the inhalation of dust* ; hence irritation, or some degree of inflammatory action, would appear to be a fruitful source of them. The inspired dust conveyed to the lungs must produce some immediate effect on the delicately-organised structure, rich in the supply of blood ; and what effect is so probable as a species of local inflammation, so slow in its progress, and so insidious and marked in its character, as to give rise to no constitutional symptoms? The dust is the cause of inflammation in the larynx, the trachea, and the bronchial tubes ; and as a foreign substance, it must excite a morbid action with whatever part of the animal economy it comes in contact. Why tubercles should be the result, and not other conditions of inflammation, it is not in our power to assign a satisfactory reason. The fact is obvious and unquestionable, and the occurrence of tubercles under such circumstances is so general that we cannot bring to our aid a constitutional predisposition."—P. 14.

"The disease occurring amongst this class of artisans is usually designated 'grinder's asthma,' and by writers who imagine the dust to cause extensive structural modifications in the mucous membrane of the air-passages. As a term descriptive of the morbid phenomena produced by the inhalation of gritty and metallic particles, it is objectionable. It very inadequately conveys to others the character of these phenomena. They are not simply uneasy breathing, cough, and expectoration, but these symptoms, in the cases which approximate in their broad outline to asthma, and frequently, if not generally, in addition, important structural changes in the lungs and the air-passages. In an immense number of cases which come under observation we do not perceive the phenomena of asthma, but of tuberculous phthisis; and, though modified by the circumstances of the individual, and the peculiarity of the exciting cause, the symptoms are manifestly those of pulmonary degeneration, and can be fitly designated only by a term expressive of this condition. No single term is sufficient to describe the variety of morbid results produced by the inhalation of dust. Our duty is to bring under consideration the symptoms evolved in the different stages of the disease, and leave them to suggest the name by which they can be most appropriately classified."—P. 15.

The sentence in the above paragraph which begins by "they are not simply" is obscure. Its meaning will be better understood by leaving out the words "in the cases which approximate in their broad outline to asthma." This we should have done had we not been afraid of being accused of misquoting.

Such opinions as the above, although brought forward by a physician of the experience and learning of Dr. Holland, are not to be accepted without a severe and impartial analysis of the data on which they are founded, as they tend to overthrow medical doctrines which have the sanction of the most eminent pathologists of the present time. If chronic irritation of the air-passages and cells, whatever be the cause, is capable of *directly* producing tuberculisation in Sheffield or elsewhere, then Broussais was right, and Bayle, Laennec, Andral, Lugol, Carswell, Clark, &c., are wrong. It is now taught by the above pathologists, and nearly universally admitted, that tuberculisation is the result of a general cachexia of the entire system, which cachexia is hereditary in some, and is brought on by bad food, bad air, &c., in others. It is, on the other hand, denied that inflammation can directly produce tubercles, although it may do so indirectly, by breaking down the powers of the system, and by diminishing the vitality of the individual, so that a predisposition to tuberculisation which was before latent may come into play.

Do the symptoms and other pathological details given by Dr. Holland authorise his stating, as he does, that phthisis is *the disease* directly produced in the Sheffield grinders, and in the artisans who are elsewhere exposed to the same agencies by the inhalation of petro-metallic dust. We can conscientiously state that we do not believe this to be the case, and that from the analysis of Dr. Holland's own work.

Dr. Holland recognises, in nearly every page, the fact of the inhalation of dust giving rise to permanent irritation and inflammation of the larynx, trachea, and bronchi; he, moreover, states that the symptoms which indicate the chronic inflammation (cough, expectoration, &c.), are generally followed, in the course of time, by dyspnœa ; that the

body is bent forwards, that there is but little emaciation, no hectic fever, a mucous or opake expectoration, sonorous sound of the chest on percussion (Dr. H. is surprised at this, as well he may be, considering that he appears to look upon these symptoms as indicating phthisis), that the respiration is puerile or bronchial, &c. (pp. 12, 22, 23). After death, in the cases in which these symptoms have existed, the mucous membrane lining the air-passages is found thickened, the bronchial tubes are dilated, and the pulmonary tissue is expanded (pp. 12, 36). These are the symptoms which Dr. Holland repeatedly describes, to which he cannot give a name (vide 2nd extract, p. 12), and which he appears to consider a nondescript form of phthisis. It is a singular fact that these symptoms are neither more nor less pathological and anatomical than the symptoms of "pulmonary emphysema," a malady the very existence of which is noteven mentioned by Dr. Holland. The enlargement of the bronchial tubes, and the expansion of the pulmonary tissue, which Dr. H. says he is the first writer to allude to, are the principal anatomical characters of emphysema, and are to be found given as such, not by Laennec, it is true, for he knew and said but little about emphysema, but by Louis, Jackson, Fournet, and by nearly all those who have written within this last twelve years on the pathology of the lungs. Dr. Holland may be, however, and, we believe is, the first who has stated that these lesions are frequently occasioned by the agency of the causes he has written upon.

It is the more singular that the real pathological meaning of what he saw should have escaped Dr. Holland in this instance, since he himself mentions (p. 15) that the disease under which the grinders labour is "usually designated grinder's asthma," and all those who are acquainted with the modern pathology of pulmonary emphysema are aware that it is the real name for a very large proportion of the cases which were formerly denominated "asthma."

The facts of the case, no doubt, are these:—The inhalation of the petro-metallic dust occasions a chronic form of bronchitis, the lengthened existence of which, as is always the case, brings on emphysema, that is the rupture of some pulmonary air-cells, the dilatation of others (expansion of the pulmonary tissue—Dr. H.), and subsequently the dilatation of the bronchial tubes. Then follow dyspnœa, mucous or opake expectoration, and all the other symptoms enumerated.

How, then, are we to explain the extreme frequency of tubercular phthisis, if these symptoms are not the symptoms of tubercular phthisis, and if inflammation of the bronchial membrane does not give rise to the deposit of tubercular matter? Firstly, in all large towns like Sheffield, phthisis, in the ordinary course of things, carries off one-fourth or even one-third of the entire population, and a much greater proportion among the lower orders. Secondly, Dr. Holland states himself, in every part of his work, that these artisans are a reckless, dissipated class of men, generally exposed to all the privations of poverty, working and living in a most vitiated atmosphere; that is, they are exposed to all the causes capable of generating phthisis, even should the predisposition not exist; bad food, bad air, bad clothing, and dissipation. Thirdly, there can be no doubt that the chronic affections of the respiratory system act indirectly in bringing on tubercular affections, by destroying the vigour of body and mind of those who labour under them, and by thus exposing them unprotected to the action of the causes which we have enumerated.

From the examination of the facts of the case we think we are warranted in concluding with the well-known Parent Duchâtelet, in opposition to M. Lombard, Dr. Holland, and all those who have embraced the contrary opinion, that mechanical irritation of the aerial passages does not *directly* produce tubercular phthisis, and that it can only be considered a cause of phthisis, inasmuch as it weakens and impoverishes the economy at large, and thus renders it more liable to become influenced by other morbid causes.

We have said so much on the pathology of the "grinder's disease" that we have but little room for any further extracts from, or remarks on, Dr. Holland's interesting treatise;—a circumstance, however, which we regret the less, as we think that what we have already said will induce those of our readers who take an interest in thoracic pathology to consult the work itself.

Dr. Holland's directions with regard to treatment are sound and practical. In those forms of the disease which we look upon as cases of bronchitis and emphysema he employs leeches, blisters, emetics, expectorants, alteratives, and tonics—such, for instance, as

ipecacuanha, oxymel of squill, syrup of poppies, cinchona, cascarilla, &c.—and, as might be expected, often gives great relief. When, on the contrary, there is dulness on percussion, emaciation, hectic fever, &c., that is, in cases of true tubercular phthisis, he is as much at a loss to find out an efficacious treatment as the rest of the profession.

For the prevention of the formidable diseases entailed on the thousands of grinders through whose labours Sheffield thrives, Dr. Holland has invented an apparatus, the description of which we must transcribe, as it does honour to his ingenuity and philanthropy:—

"A wooden funnel, from ten to twelve inches square, is placed a little above the surface of the revolving stone, on the side the farthest from the grinder, and this funnel terminates in a channel immediately under the surface of the floor; or we may consider the channel simply as the continuation of the funnel, in order to avoid any confusion in the explanation. The channel varies in length, according to the situation of the grinder, in reference to the point where it is most convenient to get quit of the dust. If we suppose that eight or ten grinders work in the same room, each has his own funnel and channel, and they all terminate in one common channel, the capacity of which is, perhaps, twice or three times as great as each of the subordinate or branch channels. The point where they terminate is always close to an external wall; at this point, within the general channel, a fan is placed, somewhat in form like that used in winnowing corn, and to this is attached a strap, which passes upwards and over a pulley, so that whatever puts the pulley in motion causes the fan also to revolve. The pulley is placed in connection with the machinery which turns the stone, so that whenever the grinder adjusts his machinery to work, he necessarily sets the pulley and the fan in motion. The fan, acting at this point, whatever may be the length of any of the subordinate channels, causes a strong current to flow from the mouth of each funnel, which carries along with it all the gritty and metallic particles evolved, leaving the room in which the operations are pursued free from any perceptible dust. When the whole apparatus is perfect and in excellent condition, the atmosphere of the place is almost as healthy as that of a drawing-room."

This plan of obviating the frightful evils attendant upon the present system of grinding is so simple that, should it prove as efficacious as it appears to be, we think Government ought to take the subject in hand, and compel the owners of wheels to employ it, under a severe penalty.

The third part of Dr. Holland's treatise teems with interesting information respecting the mental, physical, social, and hygienic state of the Sheffield artizans, and we heartily recommend the whole as a most instructive and readable work.

We shall conclude our review by extracting one of the many interesting tables Dr. Holland gives, illustrating the fearful mortality which falls on these "parias" of our manufacturing districts. The table is constructed on the following basis:—Supposing we took one thousand persons living at the age of twenty, in England generally, the same number of the non-grinding population of Sheffield, and the same number of fork-grinders, also of the age of twenty, the numbers dying at different periods of life would be as follows:—

Ages.	England.	Sheffield.	Fork-grinders.
20 to 29	160	184	475
30 to 39	136	164	410
40 to 49	126	158	115
50 to 59	127	155	0
Above 60	451	339	0
	1000	1000	1000

That is to say the entire thousand would have disappeared by the age of fifty.

Pathology of Sea-Sickness.—Affections of the eyes, as irritation of the retina, sudden light, rapid interchanges of light and darkness, or quick motions of objects looked at, cause vomiting, from the circumstance that such impressions of the visual nerves affect the same parts of the brain that are concerned in vomiting (namely the corpora quadrigemina). The notion that sea-sickness is entirely due to a disturbance of vision by continual changes of place in objects seen, is, however, shaken by the fact that blind persons are as subject to the affection as those who see. The actual and chief cause of sea-sickness lies (probably) in a peculiar affection of the corpora quadrigemina, by which it is a natural result that it should follow disturbances of vision produced by the rolling of a vessel. But such disturbance is evidently not a necessary prelude to it, as is proved by its occurrence in the blind; and some experiments by Burdach have gone to show that the peculiar affection of the corpora, productive of vomiting, is caused by the continual efforts of persons on board ship to preserve their equilibrium.

As a general rule, the less a healing sore is interfered with the better, and certainly, when it is dressed, merely the superabundant pus should be wiped away, not from the sore itself, but from its vicinity.—*British and Foreign Medical Review.*

THE LANCET.

London, Saturday, February 10, 1844.

The announcement which was made by the Secretary of State for the Home Department, in the House of Commons, on Monday evening last, proclaims, in a voice not to be misunderstood, that the war upon medical interests is about to commence in downright earnest, and that if the members of the medical corporations in the United Kingdom of Great Britain and Ireland do not now buckle on their armour, and prepare for the field, stimulated to action by an undaunted resolution, they will become the contemptible victims of arrogance, avarice, and oppression.

Sir James Graham declares that he has a Bill in preparation with reference to the College of Physicians, and that he has another in a state of forwardness which refers to medical practitioners, generally, throughout the empire. A new Charter for the College of Surgeons in London has just been granted; a new Charter for the College of Surgeons in Ireland is also just granted; a new Charter for the College of Surgeons in Edinburgh is about to receive the sign-manual of the Crown; a Bill is in preparation for the College of Physicians; and another Bill, relating to medical law, generally, is in preparation,—with probably some half a dozen other charters, to be bestowed, in a wanton spirit of prodigality, upon some of the nearly twenty institutions which are already empowered to grant diplomas, certificates, and licences, in relation to the practice of medicine.

Was there ever before witnessed so incongruous, so monstrous, a hash in legislation and government? The profession, generally, although armed with the most righteous cause that ever nerved a great body of scientific men, produces no feeling of fear or apprehension in the minds of its enemies,—because it has exhibited so much of meekness and humility under oppression, because of the discordant opinions which its members have professed amongst themselves,—because, in a word, it is not true to itself. The time, however, has at length arrived when petty jealousies must cease to operate, opposing jealousies amongst the medical associations disappear, and dissensions on questions of detail no longer prevail in the great and determined battle which must be fought for the possession and security of a philosophical first principle in medical government.

If the members of the profession are labouring under a delusion with respect to the forces against which they have to contend in the field where their final battle has to be fought, it is right that they should have pronounced to them, at once, the simple and naked truth on that subject. The contest is to be determined in the two Houses of Parliament. How stand the antagonised political party forces? The Government, and the immense majority of its followers, are hostile, decidedly hostile, to medical interests. The opposition, headed by the Whigs, if not hostile, cannot be said to be *friendly* to those interests. In a word, there cannot be said to exist a medical party in either House of Parliament.

Such are the materials *with* which, and *upon* which, the members of the profession have to work. The labour, therefore, that is about to be undertaken, is an herculean one. But we ought not to be dismayed on that account. The greater that are the difficulties which we have to encounter, the more noble and glorious will be our victory; but the immensity of the task requires immediate, zealous, and unremitting application. There must be some well-laid scheme, a clearly-defined plan of operations, to be followed, or the labourers will work discordantly, and, therefore, without an united force. We regret that we cannot commend the course of proceedings which was lately adopted at the meeting at the Crown and Anchor Tavern, and we must still urge that that assembly was convened without

sufficient notice; the resolutions were ill-drawn, incorrect in principle, and altogether unsuited to the present crisis; and the powers which were conferred by the meeting upon the committee were utterly insufficient for the accomplishment of any great object. Besides, the numbers collected on the occasion, amounting, certainly, to not more than two hundred legally-qualified practitioners, were not enough to give a character of importance to the measures of the assembly.* But while we make these statements, which truth really demands at our hands, we willingly give credit to the originators of this little movement against the greatly-obnoxious Charter.

The question must now be asked and answered,—Are the members of the medical profession prepared, as an united body, to boldly enter the field, and fight their own battle? A meeting of one or two hundred medical practitioners, every quarter of a year, is only a sign of trifling with the all-important subjects which are now in agitation. If the laws which relate to the medical profession are to be remodelled, and placed on a just basis, such a result cannot be achieved excepting it be mainly by the exertions of the members of the profession themselves. Within a brief period a PLAN OF OPERATIONS will be respectfully submitted to them for their consideration and approval, and unless one of a more effective and comprehensive description be brought forward for their inspection, it is earnestly to be hoped that they will adopt it in a spirit, and act upon it with a firmness of purpose, which shall ensure to the members of the medical profession of this empire a just and well-digested system of medical law and government.

WE last week endeavoured to explain how it is that not only the ignorant, but also the educated and the enlightened, fall so often into the nets held out by quackery. We also endeavoured to explain the, at first, still more extraordinary fact, that medical men, of more or less ability, are always to be found ready to adopt and defend *any* medical fallacy which may happen to be brought before the notice of the public. We have already repeatedly spoken of hydropathy in THE LANCET, and have published various accounts of the manner in which the "water-cure" is administered. As it appears, however, to be the fashionable novelty of the day, we think it may be worth while to devote a few of our pages to a more searching analysis of the subject than any we have hitherto made. At the same time we wish it to be well understood that we have no intention to enter into a controversy with professed hydropathists on the merits of their panacea. We would willingly do so, were it likely that science would benefit by such a course, but this, we feel certain, would not be the case. We should only be conferring on them that notoriety which, of all things, they most covet. As we consider it more than probable that to many of our readers the "science" of hydropathy is still a mystery, we shall preface our remarks by a condensed sketch of the origin and nature of the water-cure.

As we stated in our last number, the originator of hydropathy is VINCENT PRIESSNITZ, a small farmer of Graefenberg, a village in Silesia. This man having used cold water, as a bath or as an affusion, in the treatment of several trifling injuries which he had himself received, was led to believe, by the success which apparently followed, that he had discovered a new and valuable means of curing disease. He, therefore, recommended his remedy to his friends and neighbours, and having met with similar success in the treatment of their infirmities, began to acquire the reputation which often in agricultural districts falls to the share of the peasant who fancies himself in the possession of a "good receipt," and who contrives to make others participate in

* Bitter are the complaints from correspondents in all parts of the country on this subject. Nearly the whole of them allege that the opinions of such a meeting ought not to be regarded as conveying to the Government any correct notion of the views, intelligence, or power, of the professional body in this country.

the belief. Although an ignorant peasant, free from the incumbrance of any kind of learning, literary or medical, PRIESSNITZ is evidently an acute and shrewd man, and soon began to aim at a higher field of practice than was afforded by his boorish neighbours. He, therefore, rendered his plan of treatment more complex, and adding to the use of cold water attention to diet and exercise, professed to be able to cure all diseases. His reputation gradually increased, people flocked to him from all parts of the country, and in the course of a short time he was able to build a house at Graefenberg (1824) for the reception of his patients, and to obtain from the Government the recognition of his native village as one of the Austrian baths.

The house at Graefenberg, says Mr. EDWIN LEE, in his interesting pamphlet on the water-cure, to which we are indebted for many of the details given in this article, and which we recommend to all those who take an interest in the subject, is situated on the acclivity of a well-wooded mountain, in the centre of a very beautiful neighbourhood. Here it is that the hydropathist *en chef* presides over his rapidly-increasing subjects, and, like the God of Health, dispenses, or professes to dispense, health to his votaries. The number of the latter, it appears, rapidly increases; in 1830 he had but fifty-five patients, whereas, in 1842, says Mr. LEE, he had as many as fifteen hundred.

PRIESSNITZ's establishment had not long been in existence before medical men were found ready to cover his ignorance with the cloak of their knowledge, or, in other words, to find a theory for *his* treatment. He himself scarcely knows the names of the diseases he treats, and does not seem ever to have troubled his head much about their nature. The medical followers of PRIESSNITZ have not confined themselves to sterile admiration of his "modus medendi," but have endeavoured to turn their enthusiasm to account by establishing similar institutions in different parts of Austria, Prussia, and Bavaria. Indeed, hydropathy appears to have taken, in Germany, the place of homœopathy, the most inane of all modern quackeries, which is fast sinking into merited oblivion. Three years ago they attempted to make an inroad in France, and, represented by Dr. ENGEL and Dr. WERTHER, two German physicians, applied to the Government for permission to establish a hydropathic institution in Paris. The French Government, as it very properly does on all such occasions, referred the matter to the Académie de Médecine, and the report of the Academy having been decidedly unfavourable (18th of August, 1840), the permission was refused. We are not aware that any French physician has taken upon himself to naturalise hydrotherapy in France. In England, where German visions always meet with a more kindly reception than in France, we have now, for some years past, had the benefit of hydropathic establishments similar to those which exist in Germany.

According to Dr. ENGEL, who published a small work on hydropathy, a couple of years ago, in Paris, the following is the plan followed by PRIESSNITZ in the treatment of his patients:—The sufferer is awoke between four and five o'clock in the morning, and wrapped in one or two blankets, so that the face only is free; copious perspiration ensues, and to supply the loss of fluid thus occasioned, or with some other view, draughts of cold water are repeatedly given. When this state has lasted some time, the blanket is taken off, and the patient is plunged into a cold-bath, from which he soon issues, is dried and rubbed, dresses, and walks out several miles. On his return he breakfasts on cold milk, fruits, or meats, drinking several tumblers of water. After breakfast he undergoes the cold douche or shower-bath, and then walks out again until dinner. The dinner consists of very simple, indeed often of very coarse fare, the beverage being, as usual, cold water; and after dinner the entire bathing process is renewed, excepting the douche, unless the patient is

too weak at first to bear it. In most cases, however, in the course of a few days, the after-dinner bathing is resorted to. Finally, the patient takes a light supper and then goes to bed.

This is the original treatment pursued at Graefenberg, but both there and elsewhere it has been much modified, and has always been made to vary considerably according to individual susceptibilities. Indeed, PRIESSNITZ's skill is made to consist in the extraordinary acumen with which he varies the means he employs in each particular case, according to the indications. It has always struck us as rather singular, to say the least, that the head oracle, who is totally ignorant of the nature and symptoms of disease, should see so clearly the indications for its treatment, the more so as the professional hydropathists repeat to satiety in their works that none but those who possess sound medical knowledge are fit to be entrusted with the management of the panacea. According to Mr. LEE, the after-dinner sweating and bathing process is now discarded both at Graefenberg and at the other establishments. The first or sweating process has also been modified. Instead of the patient being at once wrapped in a blanket, he is first enveloped in a wet sheet, and then the blanket is applied. Cold hip-baths are frequently used in affections of the pelvic viscera; head-baths are also used, the occiput lying in a basin of cold water; and wet cloths are worn for a longer or shorter period round the body or limbs.

Most of PRIESSNITZ's followers modify his plan of treatment without throwing off their allegiance. One of them, however, named WEISS has settled in open rivality to him a few miles only from Graefenberg, and pretends to have very much improved upon the primitive treatment. The principal difference appears to be that he uses *two* wet sheets instead of one. WEISS was a veterinary surgeon before he took to hydropathy, and having a few medical ideas, despises the ignorance of PRIESSNITZ, and has started a theory. All diseases, he says, are to be attributed to an accumulation of improper substances in the blood; these he eliminates by activating the function of absorption throughout the economy, and by tonifying the animal tissues. He states that he elevates hygiena so as to place it on a level with the morbid alterations under which the patient is suffering. WEISS is not the only rival with whom PRIESSNITZ has to contend. As our readers will see, on referring to our review of British journals, an enlightened neighbour, fired by his success, has ingeniously come to the conclusion that thirst is as likely to cure disease as drinking cold water, and, putting his idea into execution, wraps up his patients (for this fellow likewise finds patients) in wet sheets, and then deprives them of all fluids. It is really laughable to see how ready the public is to follow the conceits of any ignorant clown who attempts to turn their credulity to his own account.

Definitively the treatment may be said to consist in the temporary application of cold to the skin after a copious perspiration has been produced without artificial heat; in total abstinence from all stimulating fluids; in simple diet, early hours for rising, and great bodily exercise. Next week we will examine how far such a plan of treatment is likely to prove successful in the treatment of disease, speaking generally, and which are the diseases that it is calculated to benefit.

ADDITIONAL communications have reached us from several correspondents on the subject of spermatorrhœa. Not a few of the writers lose sight of the *medical* question, and entangle themselves in discussions on religion and morals. Now, this has occurred in the instance of many other scientific questions besides that of spermatorrhœa, and in whatever instance it has occurred it has had two invariable effects,—the first that of impeding all candid scientific inquiry; the second, that of injuring the cause of religion and morality, by inducing the false belief that the observation of nature leads to conclusions

opposed to the doctrines of the one or the precepts of the other. The investigations of the physical philosopher have nothing whatever to do with religion or morals except in as far as the contemplation of nature lays the foundation of natural theology, and in so far as the physical and moral conditions of mankind act and react on each other. The philosopher may pursue his researches in the full confidence that if his physical conclusions be just, they will not be found to come in collision with any true principles of religion or morals. There is scarcely a science that has not suffered severely from having been brought into needless apposition with these subjects. Once the notion of the earth's revolving round the sun was considered *atheistical;* we all adopt this horrid theory now-a-days. Within our own memory furious battles have been fought between the geologists and those who adopt the Mosaic cosmogony; but it is now agreed among the best authorities on geology that the two are not in the least at issue. Nothing but evil can ever result from this dragging in of religion and morals by the head and ears. We assure our correspondents on the subject of spermatorrhœa that a simply physical view of it is the only one from which any benefit can accrue to medicine, though an opposite manner of regarding it might load our columns with opinions never to be reconciled, and one, possibly, about as near the truth as another.

We beg to say that any papers forwarded to us on the subject of spermatorrhœa which announce any new facts or even ingenious suggestions relative to its pathology or cure, will find a place in our pages. The vices which most frequently lead to spermatorrhœa may be fit matters for discussion, but spermatorrhœa, as a *disease*, belongs solely to medicine. The question whether complete continence be a virtue or otherwise is one for discussion among the *moralists*. Whether it be a cause of sexual debility, and of spermatorrhœa, is a fit subject of *medical* inquiry, although, we may add, by no means an easy one, since the point can only be determined satisfactorily by a numerical reference to bodies of men who lead continent lives. No doubt, there are divers bodies of men who profess to live continently, but whether they do so or not is known only to themselves, or to others who have sufficient reasons for not being communicative.

HOUSE OF COMMONS.

Tuesday, Feb. 6, 1844.

MEDICAL REFORM.

Mr. Macaulay wished to ask the right hon. baronet at the head of the Home Department one or two questions on the subject of medical legislation. The right hon. baronet last session stated that it was the intention of her Majesty's Government to introduce a bill for the regulation of the medical profession. He (Mr. Macaulay) was desirous of knowing whether that bill was matured, and whether the house had any right to entertain any reasonable expectation that the Government would proceed in the matter this year? He had heard that the right hon. baronet had granted two charters to medical corporations. Would those charters be laid on the table of the house?

Sir J. Graham said he had no objection to lay upon the table of the house the charters conferred upon the Colleges of Surgeons of England and Ireland to which the hon. member referred. The bill alluded to by the hon. gentleman was nearly prepared, and would be proceeded with soon. The measure had relation to a reform in the College of Physicians, and to the medical profession generally throughout the united kingdom.—*Times*, Feb. 7th.

NOTE FROM DR. LYNCH.

To the Editor of The Lancet.

Sir,—As the letter of Sir Benjamin Brodie, which you inserted last week, implies a charge against me of misrepresentation, I beg to give the following reasons for making the public statement that he had described the great body of general practitioners as a subordinate class:—First, that he is reported, in The Lancet, at that period the only record of medical affairs, to have used it at a meeting of hospital surgeons. Second, the charge is repeated at page 215 of the first volume of that work for the year 1829, in a letter from a correspondent. Third, that the assertion was repeated, on several occasions, with editorial comments of The Lancet and other journals, without any attempt to deny or refute it. Fourth, that he frequently used the term higher and lower grades in his evidence before the Select Committee of the House of Commons. Fifth, the charter itself, which he then pro-

pounded and since succeeded in effectuating, contains all the invidious distinctions which degrade the members who were before equal, and creates a body of fellows without any fixed standard of qualification, or without reference to age, station, attainment, or utility; and thus, as a necessary consequence, all the members not belonging to the fellows are placed in the category involved in the question 5723 of the same inquiry,—Would the members *of your proposed lower* grades, &c.? Sixth, because all those who practise midwifery, the most useful and indispensable, and frequently the most difficult, branch of medicine, requiring knowledge, skill, and great manual dexterity, are deemed unworthy of a seat in the council of the College of Surgeons! On this silly pretext nine-tenths of the members to whom the maintenance and restoration of the health of the great majority of the people of these realms are entrusted, are made a subordinate or lower class. I leave to the philology of the learned and ingenious baronet the choice between the two terms. For my part, I consider the latter to be the more offensive. I am, Sir, your obedient servant,

JORDAN ROCHE LYNCH.

February, 1844.

FOREIGN DEPARTMENT.

FUNGOUS POLYPI OF THE BLADDER, AND THEIR TREATMENT BY LITHOTRITIC INSTRUMENTS.

THE following cases of fungous polypi of the bladder, and the subjoined remarks on the application of lithotritic instruments to the treatment of these morbid growths, published by Dr. Vaché, in a late number of the "Experience," we extract, as well deserving the attention of our readers.

CASE 1.—The man whose case we are about to narrate, was 48 years of age, and of a thin, spare habit of body. Although accustomed to drink to excess for many years, his health had always been good until he experienced the first symptoms of the malady under which he laboured when he applied for relief. About December, 1842, he began to feel a frequent desire to make water, and some little difficulty in complying with the want. The volume of the flow of urine diminished, and sometimes it only came drop by drop. Severe pain was felt at the extremity of the penis on the emission of urine; this pain increased in intensity towards the end of the excretion, and disappeared with the last drops. Generally speaking the urine was clear and limpid; sometimes, however, it was turbid, and on cooling gave a yellow deposit. These phenomena gradually increased in intensity; the wish to urinate returned every half-hour, and the pain became more violent. The flow of urine was exceedingly small and weak, and it was mixed with blood. On the first appearance of hematuria, which occurred after a drunken fit, the patient gave up drinking entirely. The hematuria, however, returned irregularly, without its being possible to attribute its appearance to over-fatigue or to any other appreciable cause. He then consulted a medical man, who examined the bladder with an ordinary catheter, and thought he recognised a small stone in that organ. On this discovery being communicated to him he decided on coming to Paris to be operated on.

On his arrival, as he was found to be in a very satisfactory state, no blood having appeared in the urine for several days, a first exploration was immediately made with a common catheter. Although the patient presented a peculiar induration of the gland and corpora cavernosa, and an incurvation of the penis on the right side, owing to congenital atrophy of the corresponding corpus cavernosum, the catheter was introduced with ease as far as the neck of the bladder. It then became difficult to propel it any further until the handle was depressed, which seemed to indicate the existence of a tumour of the prostate, although no increase in the size of the prostate was perceptible on examining by the rectum. No stone was found, but as it was considered that the tumour of the prostate might conceal its presence, it was decided that on another day a minute examination of the bladder should be made with a more accurate instrument. In the meanwhile the patient was allowed to rest, the treatment being confined to baths, enemata, and the repeated introduction of bougies, in order to diminish the sensibility of the urethra.

Eight days after the first visit, a minute and careful exploration of the bladder was made with the spoon-billed lithoclast. It was ascertained that there was no calculus, but that a fungus was implanted on the right side of the vesicle trigon. Its form and volume having been examined by means of the above instrument, it was found to present a narrow pedunculated basis, and it was therefore thought advisable to destroy it by crushing. The operation was easily performed, and scarcely gave rise to any pain. Immediately afterwards the patient took a bath, wherein he passed a portion of fungus, and a little blood. The operation was neither followed by fever nor by local pains. On the second day after the operation, he again voided another considerable portion of fungus. Five days later a second sitting took place, in which what remained of the tumour was crushed in the same way as before. Immediately after the operation, the patient was told to urinate, and passed, with a little difficulty, a quantity of fleshy detritus, some

of which were of considerable size. They appeared of a similar texture to the mucous polypi of the nose, only rather more consistent. He voided, as before, a small quantity of blood, but the slight hæmorrhage was not afterwards renewed. After this second sitting the patient found himself in a very satisfactory state. He no longer felt any pain in making water; the flow of urine was as full and as free as before he was taken ill, and the desire to urinate was only experienced at considerable intervals. On a third sitting taking place, eight days after the second, no fungous portions were felt on the right side of the vesicle trigon, but on the left were found several prominences resting on a wide basis; they were destroyed without the basis being attacked. A week after this last operation the bladder was examined with care; no inequalities were felt on the vesicle trigon susceptible of being seized, and nothing anormal was discovered in the other regions of the bladder. In the course of a short time, finding that he voided his urine with as great ease as at any period of his life, and without the slightest pain, he left Paris to return home. The treatment had only lasted six weeks, and had not at all fatigued him; he was nearly all the time able to walk about.

Remarks.—The above case (says M. Vaché) illustrates two facts: first, the immense influence which lithotrity, with the assistance of the ingenious instruments it employs, has exercised over the diagnosis and treatment of affections of the bladder; secondly, the facility with which fungous tumours may be confounded with calculous affections, even when free from all complication. In both these latter affections the symptoms are identical, or nearly so, as also in their progression. There are the same frequent desires to urinate; the same pains during and after the excretion of urine, passing along to the end of the penis; the same efforts, followed by slight hematuria. We may, however, remark, that in calculous diseases, the pain felt in the penis lasts after the evacuation of the urine. If, therefore, we only consult the symptoms presented by the patient, the analogy being so great in the two diseases, it is next to impossible to arrive at a correct diagnosis, unless we are favoured by some fortunate circumstance, on which we cannot calculate. The case we have just related, however, shows that, by means of the instruments used in lithotrity, we may arrive at a correct diagnosis in all cases in which the bladder has not lost its capacity. When the bladder has shrunk, it becomes difficult, if not impossible, to manœuvre the instruments in its interior, and then even this source of information is closed. The exploration of the bladder with an ordinary catheter, cannot evidently enable us to ascertain the true state of things, as is proved by the above case, in which catheterism was twice resorted to, without giving any correct information. Indeed, the first surgeon consulted, trusting to this means of examination, had erroneously diagnosed the existence of a calculus.

With the assistance of the lithotritic instruments, if the sensations perceived are carefully analysed, and the separation of the branches, as indicated by the graduated scale, accurately noted, the various diameters of the tumour may be ascertained. By the same means we may also learn whether or not it is sensible, whether it is pedunculated, and lastly distinguish it from a calculus, or from the columnæ carneæ of the bladder. As to the nature of the vegetations that develop themselves in the interior of the bladder, it is proved by the treatment itself, which, destroying them and causing their expulsion from the bladder, shows whether they are mucous or fibrous. It is only with carcinomatous tumours that it would be possible to confound them; but when a carcinomatous affection of the bladder exists, the general state of the patient, the colour of the skin, the nature of the pains, the hematuria, the sensibility of the tumour on pressure, and the antecedents of the case are nearly always such as to demonstrate what is the real nature of the case, and to preserve the patient from any hazardous local treatment.

It is not only in the diagnosis of these affections that we are obliged to resort to lithotritic instruments, we are also compelled to have recourse to them in their treatment. The various operations which are employed against polypi of the nasal fossæ, such as excision, cauterisation, ligature, have all been tried in vesical polypi, but have been universally pronounced difficult in their application and dangerous in their results. The only two operations which are really feasible, are, forcible extraction and crushing. M. Civiale, who has paid more attention to this form of vesical disease than any other surgeon, rejects even extraction, as often giving rise to serious consequences. He says, that when it is performed, considerable portions of the vesical and urethral mucous membrane are often torn off. He, consequently, confines his practice to crushing with the lithoclast, an operation which he states he has often successfully performed, and which is by far the least dangerous. The lithoclast, with spoon-billed extremities, is the instrument which, of all others, deserves the preference, according to M. Civiale, who nearly always uses it.

The cases which we have observed, and those given by M. Civiale, in his different works, show that pedunculated polypi may be thus attacked, whatever be their seat, in the cavity of the bladder or on its neck. These polypi, when free from all adhesion, and floating, as it were, in the cavity of the bladder, are easily destroyed. It is not so

with those that rest on a wide basis, and strongly adhere to the parietes of the bladder; they cannot be safely attacked, and should be scrupulously respected. The portion of cases in which crushing may be applied is thus much restricted, as an attempt to crush a tumour with a large and indurated basis might give rise to serious inflammation.

It is principally to M. Civiale that we owe the adaptation of lithotritic instruments to the treatment of vesical polypi. Previously to his labours on this subject, most surgeons denied the possibility of recognising their existence during the life of the patient. Nor is this surprising, when we consider that the ordinary catheter is inadequate to demonstrate their presence, and that it was, until lately, the only means of exploring the bladder which was known. The following case exemplifies, in a striking manner, the necessity of resorting to a more accurate means of investigation. Had the lithoclast been used at an early period of the disease, and the polypi destroyed, the life of the patient would, no doubt, have been much prolonged.

Case 2.—A man, more than seventy years of age, had long voided blood with his urine; he was also troubled with frequent desire to urinate, and experienced severe pains at the end of the penis after the emission of the urine. His medical attendant thought he had a calculus, and sent him to Paris to be operated upon. On his arrival he was examined with a common catheter, but no stone was found. The bladder was ascertained to be small, and to contain a slight quantity of urine mixed with blood, so as to present the appearance of wine dregs. The treatment was confined to the use of baths, enemata, and injections into the bladder of warm water, with a view to increase the capacity of the bladder by diminishing the contractility of its parietes.

This treatment had been pursued for several days, and already the urine began to be less discoloured by blood, when, all at once, the patient fell into a state of great prostration, without any appreciable cause. Fever followed; during the night he became delirious; the following day he was comatose, remained so several days, and then died. On the autopsy being made, the bladder was found so much contracted as not to be larger than a goose-egg; the muscular tunic was considerably hypertrophied. On the mucous membrane were found several raspberry-like tumours, with very small pedicles; between their mammary prominences there was a certain proportion of the thick black fluid voided during life, mingled with calcareous matter. The prostate was not enlarged. One of the kidneys was healthy, the other was double the normal size. On being examined, it was found to be softened, and the seat of great congestion, presenting here and there black melanic spots. The fibrous covering of the kidney tore off like the rind of a peach. The cerebral substance was quite healthy, but the membranes were gorged with serosity.

Of the two cases given by M. Vaché, the first is the more interesting, inasmuch as so many of the symptoms indicating a calculus were present, that nothing but the careful exploration of the bladder which the man underwent could have proved its non-existence. This, however, is not always the case when vesical polypi exist, as M. Vaché seems to think. We remember, well, having seen, in M. Velpean's wards, some years ago, an old man, who had a small polypus inserted near the neck of the bladder. The only symptom he presented was difficulty in making water, and occasionally complete retention; he had no pain in the penis. Yet, when the catheter was introduced, it penetrated with the greatest ease into the bladder; there was no enlargement of the prostate, and no foreign body in the cavity of the bladder. The man died from some other disease, which enabled M. Velpeau to examine him. The nature of the disease had, however, been recognised, during life, by M. Velpeau. The polypus was situated very near the middle lobe of the prostate, and of a firmer consistence than the polypi which M. Vaché describes. The polypi which appear in the cavity of the bladder, on its mucous membrane, as also those which appear in the fauces and intestinal canal, are nearly always soft, or raspberry-shaped (*mucous*), whereas those of the nares and uterus are mostly fibrous. This is, no doubt, to be explained by the difference which exists in the anatomical structure of the mucous membranes which are the seat of disease. In the nares, the lining membrane is not merely a mucous, but a dense fibro-mucous tissue; and in the uterus the thin mucous film which lines the internal cavity, lies on a dense fibro-muscular structure. In the other regions, just named, the mucous membrane is nearly free from all mixture with fibrous tissue.

M. Vaché's second case only bears on the subject before us so far as it proves that polypi of some size may exist in the bladder without the common catheter indicating their presence. The lesions of the urinary organs were too severe for it to be possible to attribute to the polypi the symptoms presented by the patient. The case is a good illustra-

tion of the peculiar form of serous apoplexy which sometimes terminates the existence of aged people labouring under extensive and long-continued disorder of the urinary organs. The disease of the kidney and bladder was evidently chronic inflammation.

BRITISH AND AMERICAN MEDICAL JOURNALS.

In a lecture by the late Professor Colles, published in the "Dublin Medical Press" for Jan. 17th, the following remarks occur on a form of

ERYSIPELAS,

which is not generally described in books:—

"On the going off of erysipelas it sometimes leaves a fulness behind it, which pits on pressure like anasarca, but which is readily distinguished from it by the thickened and roughish cuticle. Now, it is a remarkable fact, that if the skin be left in this morbid condition, it will be attacked a second time with erysipelas at some future period—it may be in three, six, or twelve months, but it will not escape another attack, one that will be more severe than the first, and which will leave a still greater fulness and thickness than the first did. When this happens the patient will, in my opinion, be subject to returns of the malady for the rest of his life. Such a disease I should be inclined to call *chronic erysipelas*. I have tried everything I could think of to cure this chronic form, and although in every trial I produced an amendment, I never completely succeeded with the existing affection, or in preventing a return of the erysipelas in its more acute form."

We have seen this disease, in females, assuming a periodic character, and it has always proved, as remarked by the professor, obstinate in its treatment. In some instances the disease seemed to be connected with an albuminous state of the urine.

THE SOUNDS OF THE HEART

were long a subject of investigation, dispute, and doubt. Now that the matter is settled it may be well to record the various opinions which have been held concerning them. Dr. Bellingham affords us the opportunity of doing so in a lecture published by him in the same journal:—

"The cause of the sounds of the heart, or the mechanism of their production, the order of their occurrence, and their exact seat, are points which, until within a few years, were unknown, upon which much difference of opinion has existed, and to explain which numerous hypotheses have been put forward.

"The first sound has been attributed—

"1. To the contraction of the muscular fibres of the ventricles during their systole.

"2. To the rush of blood into the aorta and pulmonary artery during the ventricular contraction, and to the collision of its particles against the parietes of those vessels.

"3. To the collision of the internal surfaces of the ventricles at the conclusion of their systole.

"4. To the impulse of the apex of the heart against the ribs.

"5. To the sudden closure of the mitral and tricuspid valves.

"6. To the vibrations which result from the change of form impressed upon the column of blood during the contraction of the ventricles.

"7. To the systole of the left ventricle alone, the second sound being referred to the systole of the right ventricle.

"8. To the collision of the blood with the walls of the ventricles during their diastole (but the first sound accompanies the systole and not the diastole of the ventricles).

"The second sound has been attributed—

"1. To the contraction of the muscular fibres of the auricles.

"2. To the systole of the right ventricle alone, or of both ventricles.

"3. To the collapse of the heart on the pericardium during the ventricular diastole.

"4. To the shock of its anterior surface against the sternum during the diastole.

"5. To the stretching of the muscular fibres of the ventricles in their dilatation.

"6. To the collision of the blood against the parietes of the base of the ventricles during their diastole.

"7. To the rush of blood through the auriculo-ventricular orifices.

"8. To the expansion of the semilunar valves of the aorta and pulmonary artery, owing to the recoil upon those valves of the column of blood in the aorta and pulmonary artery, at the moment of the ventricular diastole, which is alone correct."

The following exposition of the nature of those sounds seems the true one; it is that generally entertained:—

"The first sound is compound, and has its cause partly in the sudden tension of the mitral and tricuspid valves, by which the auriculo-ventricular orifices are closed (this is its first and loudest portion, and has somewhat of a flapping character), and partly in the contraction of the muscular fibres of the parietes of the ventricles; this is dull, and prolonged, and continues during the whole systole.

"The second sound has its cause in the sudden tension and expansion of the semilunar valves of the aorta and pulmonary artery, by which these orifices are closed; the result of the recoil upon them of the column of blood in the aorta and pulmonary artery."

THE THIRST-CHARLATAN.

Priessnitz, it seems, has found in his immediate neighbourhood a worthy rival.

Extremes meet, and those who have been saturated by the one can readily proceed to be dried by the other. Let us hear what Mr. Beamish, himself a hydropathist, says of the founder of the new system; the extract (abridged) we take from the "Med. Chir. Review" for January:—

"Four miles from Graefenberg is situated Lindiviesse, where dwells a schoolfellow of Priessnitz, by name Schrott, who told me that he had never opened a book on medicine, and never would. He undertakes to cure ALL diseases by withholding from his patients all fluids. The treatment which he has adopted may be termed the dipsopathic (thirst). He talks of placing the human being in the same condition as it existed in the womb, by means of moist warmth, communicated by *three* wet sheets, in which the patient sleeps, applied in a manner similar to Priessnitz's *one*, the process usually commencing at two o'clock in the morning. The patient remains packed up till eight or ten o'clock. The total abstinence from drink is carried on sometimes for *eight* days consecutively; the alvine excretions cease, and the urine is excreted in small quantity, very turbid, and deposits various salts. One patient told me that he had been twelve days without any relief from the bowels; and I heard of one who had been *seven weeks*. Sometimes, however, diarrhœa occurs, which Schrott considers as a favourable crisis. By depriving the stomach of fluid the absorbents of the skin are brought into powerful activity; and, by the moisture having to travel from the extremities of the frame, Schrott thinks that it carries with it the humours of the blood to the bladder, from whence they are ultimately expelled with the urine; because in the urine he finds large deposits, to which he triumphantly points as containing the extraneous matter that caused the disease."

In the "Edinburgh Monthly Journal" for February, Dr. Christie publishes a case of

EXOSTOSIS WITH FUNGUS HÆMATODES OF THE FEMUR,

of which the following is an analysis:—

A. G., aged forty, consulted Dr. Christie in the beginning of March of 1843, for "an immense swelling" of his right thigh, extending from the condyles of the femur to within one inch and a half of the lesser trochanter—it presented the appearance of a large oval tumour. It was perfectly hard to the touch everywhere but at one point, corresponding to the external condyle; here there was an indistinct feeling of fluctuation. From the patient he obtained the following particulars:—That for upwards of twenty years there had been a swelling gradually increasing; that it caused but little if any pain, except when he was unusually excited, or on a change of weather; these pains he attributed to rheumatism, and took no notice of the tumour. About this time however, the tumour became more painful, especially in the part where the indistinct fluctuation existed. Poultices were applied, and in about a week, a lancet being introduced into the part just mentioned, only bloody ichorous matter flowed. The poultices were continued, and repeated openings made, but no pus followed. The pain now became excruciating, and was only relieved by large doses of solid opium. As *cure* could not be hoped for, and as the patient's general health began to give way under severe and constant pain, the doctor proposed the only means of giving relief, viz., the amputation of the limb, but to this he could not make up his mind. Matters went on for about three months, getting gradually worse, but still he could not be induced to submit to the operation. About the middle of August, however, a large fungus burst forth from the place over the condyle, of a genuine cerebriform appearance, accompanied with a sanious discharge of intolerable fœtor. Soon an active hæmorrhage, followed by a second, induced him to hazard the operation, which was performed on September 2nd. "As to the operation," Dr. Christie remarks, "I think I was sufficiently justified in executing it, as the inguinal glands were quite soft, his pulse, though weak, being regular, and, above all, by the knowledge of the fact, that unless the knife were used, he would die a miserable and painful death." On raising him from his bed to the table an immense gush of blood occurred from the fungus, six times as much, at least, as he lost during the operation, which was performed by an anterior and posterior flap, the bone being divided one inch and a half above all of the apparently diseased parts,—eight vessels required ligature. The removal of a mass, such as the accompanying description will show this to have been, had a powerful effect on his nervous system, and caused syncope before he was laid in bed. He soon rallied, however, and from the first went on towards a good and not too tedious recovery; in six weeks after the operation union was complete, and his health totally restored.

About three years previously this man had a chronic enlargement of one of his testes; it seemed not at all allied to malignant disease, having no pain even on rough handling. It was only slightly reduced by active general and local treatment, including iodine, mercury, and blistering.

Dr. Kilgour gives a description of the tumour:—

It weighed eleven pounds and three-quarters. It was of an oval shape, having the femur in its long axis; its long circumference being twenty five inches and a half, and its short twenty-one inches and a half. It approached close to the condyles. It was equally solid and impenetrable to the knife

in all parts, except at the lower and outer side, where a bloody fungus-like matter admitted the passage of a probe to a great depth. The tumour was divided longitudinally. In the divided surfaces the outline of the two halves of the femur was very distinct, the cancellated portion, as well as the cortical, being reduced in size, so that the femur appeared more of the size of a child's than of that of an adult. It had no medullary canal, the centre being filled of closely-packed cancelli. To the finger-nail the portion of tumour outside the femur was as hard as was the central structure of the femur itself.

Immediately above the condyles a soft bloody fungus had entirely usurped the place of the cancellated structure of the femur, filling the whole space within the wall of the bone, from the tumour to the cartilages, and had made its way outwards through the femur and part of the lower end of the tumour, to the surface of the limb.

An analysis of a portion of the tumour when dried gave—

Earthy matter	63
Animal ditto	37
	100

which is rather less of the earthy matter than exists in healthy bone, according to the table of Schreger.

Dr. Dickie having examined it microscopically says, "that the Haversian canals are longer, more numerous, and tortuous, than in healthy bone."

Dr. Kilgour goes on to remark,—"I regard the specimen as an example of exostosis (*osteophyte*, Cruveilhier would call it) originating in the periosteum. As the swelling has been above twenty years in acquiring its present bulk, I am inclined to hold that the fungus hæmatodes is an accidental circumstance, and has only existed during the last nine months, when the man complained of pain. As the fungus hæmatodes, therefore, may be the effect of the local irritation, and not the result of any constitutional taint, the chances are in favour of the patient's not having any return of that disease. Had it been otherwise, the probabilities would have been, that it would have appeared in some other part, however necessary, for temporary relief, the operation of the removal of the limb might have been."

This disease appears to have been, in the first instance, a good example of what has been called by Sir A. Cooper, "periosteal exostosis;" the history, however, is given in a very imperfect manner. No mention is made as to the probable exciting cause, whether the individual ever had, in reality, rheumatism, syphilis, or had received a local injury. We are scarcely informed what influence this extensive disease had on the patient's general health. A case thus reported loses much of its value, and becomes little better than a pathological description of a curious specimen of disease. The few details which we have are instructive, they indicate the impropriety of meddling with tumours such as this.

To the "repeated" punctures made by the lancet we fear must be attributed the origin of the fungoid disease, which became subsequently developed, rendering the result of any treatment a subject of extreme doubt. It would have been well had the poor fellow submitted to amputation in the first instance; performed when it was, we fear, that his sufferings have been deferred, not ended. Sir B. Brodie, in his lecture in the last number of THE LANCET, expresses an opinion on this subject that is quite in accordance with that of all well-informed surgeons, viz., that fungus hæmatodes almost always reappears after its removal. He further states that should one of the bones be the seat of the disease it will invariably return if any portion of the affected bone remains. For instance, if there is disease of the tibia amputation should always be performed above the knee-joint, if of the femur then at the hip-joint. Thus, whilst we censure the practice made use of in the first instance, we anticipate but little benefit from that subsequently adopted.

The description given of the tumour does not call for any particular remark.

CEREBRAL AUSCULTATION.

An analysis of a paper published in the "American Journal of Medical Sciences," by Dr. Whitney, appears in some recent numbers of the "Provincial Journal." The following conclusions seem to have been arrived at by the author:—

"We have, then, four perfectly distinct auscultic phenomena, which are developed by, and which are characteristic of, particular pathological states of the encephalon. They are—1, the cephalic bellows-sound; 2, the encephalic or cerebral œgophony; 3, the *frémissement de* (?) *cataire*, or purring thrill; and, 4, the *bruit de poussin*, cooing, or musical sound.

"The first of these, in a pure or modified state, has been noticed as the accompanying phenomenon of cerebral congestion, acute cerebral inflammation, hydrocephalus, compression of the brain, scirrhous induration of the substance of the brain with softening, ossification of the arteries of the brain, and the hydrencephaloidal disease.

"The second has been noticed only in those cases of cerebral disease which are accompanied with effusion and extravasation of fluid in and about the substance of the brain.

"The third, in aneurism of the basilar artery; and,

"The fourth, which, properly speaking, is only an extraordinary modification of the

bellows-sound, is never found accompanying any state of hyperæmia or active inflammation of the brain, and, therefore, may be considered strictly pathognomonic of a state of *excessive anæmia* of that organ."

The accuracy of these conclusions can only be tested by actual experiment.

CONNECTION OF INSANITY WITH OTHER DISEASES.

Dr. Prichard, with a view of establishing the fact, "that the principal and fundamental," the primary exciting cause of insanity is, in many instances, to be sought, not in the brain, but in some other region of the body, relates, in the same journal for the 27th inst., a case in which a diseased condition of the alimentary canal gave rise to insanity, characterised by an intense dislike of food, and a complete change in the habits of the patient. "Formerly high-minded and upright, she now descended to the meanest tricks, in order to avoid this one object (the use of food) to which her mind was ever directed." After death the mucous membrane of the ileum was found extensively ulcerated, and covered with tubercles. The history of the case seemed to show that this disease had preceded the development of insanity; but the immediate change, if any, to which it gave rise, in the brain, remains a mystery which we cannot expect to unravel until we know more of the relation between the structure of this organ and its functions in a state of health. Dr. Morris, of York, who writes on the "Proximate Cause of Insanity," in the preceding number of the same journal, would consider the case just mentioned as dependent on "irritation of the nervous structure" of the brain. Irritation of this organ is, in his opinion, the proximate cause of insanity. So it may be, but what, again, is irritation? Is it more than a name—a disguise for our ignorance? The doctor quarrels with a shadow.

PARALYSIS CONSEQUENT ON LIGATURE OF THE COMMON CAROTID.

Dr. O. Fairfax records the following case in the "Philadelphia Medical Examiner":—

"On the 18th of July, 1842, I applied a ligature to the left common carotid, an inch above the clavicle, and my patient became hemiplegic, as regards the limbs of the right side, but the face was not affected. The hemiplegia may have occurred at the moment of tying the ligature, but was not remarked by the attendants until an hour or more after the operation. The patient, who was a middle-aged lady, already much reduced by chronic disease of the lungs, remained faint and hemiplegic to her death, which occurred after five days, apparently from exhaustion. Her mental faculties continued perfect to the last hour."

The absence of a post-mortem examination is to be regretted, as well as a statement of the disease for which the vessel required to be secured.

In the January number of the "New York Journal of Medicine," Dr. Quackenbush, of Albany, thus describes a simple and ingenious instrument, which he has successfully made use of for the

REMOVAL OF AN UTERINE POLYPUS:

"The instrument consists of three small rods, about eight inches in length, and perfectly straight. Two of the rods have a small hole at one end, large enough to admit the ligature. The other rod has a loop at one end, large enough to allow the first two rods to pass, and at the other end a shoulder, around which the ligature is to be fastened. The instrument is to be applied in the following manner:—The two rods, armed with a ligature, are placed side by side, and, guided by the finger, are to be passed up the vagina, along the polypus, till their upper ends reach that part of the stalk round which the ligature is to be applied. Now, the rods are to be separated and moved quite round the polypus, so that a portion of the ligature will encircle the stalk; then the loop of the third rod is to be slipped over the other two, by which means they are drawn together; all which being effected, the two rods are to be withdrawn, and the ends of the ligature with them. Now fasten the ligature around the shoulder, and leave nothing in the vagina with it but the simple rod. This instrument, I think, possesses two advantages over the one generally used. It is much more simple and easily constructed; and, as it is much smaller, it will consequently cause much less irritation during its application."

CONNECTION OF THE PNEUMOGASTRIC NERVE WITH THE OPTIC TUBERCLES.—The lesions of the brain with which vomiting is coincident, are most commonly met with in the corpora quadrigemina; from which Burdach infers that this portion of the nervous centre stands in the nearest relation to the digestive organs and functions, and that from the corpora quadrigemina the common sensibility, and the assimilative power (?) of the stomach are derived. Arnold, while he is of opinion that Burdach over-rates the degree of connection, considers it indubitable that there is a certain relation between the cerebral parts above-named and the stomach; and that it is in the corpora quadrigemina that sensations in the latter organ become subjects of perception or consciousness.—*Forbes's Review.*

NEVER is surgery so beautiful and brilliant as when obtaining a cure without the destruction of any organ, without plunging the bistoury into quivering flesh, and without causing the effusion of blood.—*Lisfranc.*

NEWS OF THE WEEK.

A motion for the introduction of billiards into Bethlem Hospital was made and carried at the board, on Monday week. We have heard that the "dark-cell" physicians of that institution are the most strenuous opposers of the improvements which the committee are anxious to carry into effect. A few days ago it was proposed to send a free ticket to Bethlem to each of the royal hospitals in London, to be awarded as a prize to the most meritorious student of each. The proposition was rejected by the physicians in question.

Commencement of a New Era in Life-Assurance Companies.—We call the attention of our readers to a late decision of the Star Life-Assurance Company (*vide* advertisement), by which it has been decided "that henceforth, in all cases of a medical opinion being given, such opinion will be remunerated with the usual office-fee." Our publisher, Mr. Churchill (who is a director), and the Star Company, deserve the thanks and support of the profession for having, the first, proposed, and the latter adopted, a motion which will, no doubt, tend to put an end to the grievance of which medical men have so loudly and so justly complained. We hope, indeed, to see, before long, the example of the Star Assurance Company followed by all other similar bodies.

The deaths in the metropolis for the week ending January 27th, 1844, show a decrease of 29, as compared with those of the previous week, the number being 1011 (*vice* 1040). The deaths are classed under the following heads:—

Diseases of the lungs, &c.	346—v.	348
Dis. of the nervous system....	177—v.	183
Epidemic and contagious dis...	168—v.	189
Old age	96—v.	89
Cancer, dropsy, and diseases of uncertain seat	85—v.	81
Diseases of the liver, stomach, and other digestive organs ..	65—v.	69
Diseases of the heart and blood-vessels	33—v.	31
Violence, privation, intemperance	15—v.	20
Disease of kidneys, &c.....	10—v.	8
Childbirth, disease of uterus..	8—v.	9
Rheumatism, dis. of bones, &c.	4—v.	8
Diseases of the skin and cellular tissue	1—v.	2
Causes not specified	3—v.	4
Total.....	1011	1040

At a late meeting of the council of the Medico-Botanical Society, several committees were formed, chiefly with a view of examining new medicines presented to the profession, both chemicals and therapeuticals, in accordance with a recommendation lately given in The Lancet.

Deaths in the Navy.—From 1831 to 1836 inclusive, the total deaths in the British navy in all parts of the globe, amounted to 13.8 per 1000. Thirty years ago, the mortality amounted to 31, and sixty years ago, to 125 per 1000, annually, of the force employed. Sir G. Blane, in 1822, remarked that the proportion of deaths in the navy ought not to be more than 1 in 80 annually, supposing that the agents affecting life were not more detrimental than among the civil population at corresponding ages. This desideratum was realised in less than fifteen years. In the six years above named, the deaths in the navy, from all causes, were no more than one in 72½, and, from disease alone, no more than 1 in 85.—*British and Foreign Medical Review.*

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

List of gentlemen admitted members on Friday, Feb. 2, 1844:—F. F. Morgan, F. S. Rogers, H. Jacobs, J. McVeagh, W. Lea, G. R. Woolhouse, G. M. C. Saunders, J. P. Scatliffe, J. Fisher, W. Parkinson, G. P. Smith, J. Wilson, A. J. Moore.

APOTHECARIES' HALL, LONDON.

Names of gentlemen who received certificates of qualification to practise as apothecaries on Thursday, February 1, 1844:—Richard Walton, Cambridge; John Parker, Bridgewater.

BOOKS RECEIVED.

On the Mechanism of Vomiting. By David Anderson, M.D., Edin. Pp. 12. (Extracted from the London and Edinburgh Medical Journal for Jan. 1844.)

On the Nature and Treatment of Tic Douloureux. By Henry Hunt, M.D. London: John Churchill. 8vo, pp. 191.

Glossology, or the Means of Diagnosis derived from the Appearance of the Tongue. By Benjamin Ridge, M.D. London: J. Churchill. Pp. 84.

An Inquiry into the Nature of the Simple Bodies of Chemistry. By David Low, F.R.S.E., Professor of Agriculture in the University of Edinburgh. London: Longman and Co. 8vo, pp. 160.

Anatomical Manipulations, or the Methods of pursuing Practical Investigations in Comparative Anatomy and Physiology. By Alfred Tulk, M.R.C.S., and Arthur Henfrey, A.L.S. London: John Van Voorst. 12mo, pp. 404.

CORRESPONDENTS.

A Reader of The Lancet.—The only restriction as to age, with reference to the medical appointments in the East India Company's service, is that the candidate is not to be *less* than twenty-two; and the surgical diplomas of the Colleges of Surgeons of London, Dublin, and Edinburgh, or of

the College and University of Glasgow, are deemed satisfactory proofs as to a knowledge of surgery. The assistant-surgeon is also called upon to pass an examination in anatomy, physiology, and the practice of physic, before the Company's examining-physician, and to produce certificates of attendance on two courses of lectures on the practice of physic and of attendance on the medical practice of a London or provincial hospital, of one hundred beds, for at least six months. We should think that the diploma of the College of Physicians would be considered, of itself, a sufficient guarantee as to medical knowledge.

Having been obliged to put an end to the discussion on spermatorrhœa, the pathology of which seems to have been exhausted by the numerous communications which we have inserted, we shall not be able to publish the cases and remarks of *Dr. J. R. S.* We must repeat that henceforth we shall insert no communication on that subject unless it contains novel information of a *strictly* pathological nature.

The impostor to whom our attention is drawn by *Mr. H. Taylor* is beneath contempt. We are at a loss to know where information respecting him could be obtained; indeed, the only suggestion we can give our correspondent is to consult the "Newgate Calendar."

A Subscriber since 1829.—On applying to Mr. Smith, secretary to the Parmaceutical Society, at the office of the Society, Bloomsbury-square, our correspondent will obtain the information he requires.

Mr. Page's case was in type when we received his letter dated Feb. 5th.

Inquirer. In the session of 1815. It is the 55th Geo. III. The 1st of August, in that year, was the time specified for the commencement of the operation of the Act.

A Borough Student. The enlarged space will admit of the additions. We fully acknowledge that there is no description of medical information which is more valuable.

A correspondent is anxious to learn if anything is known relative to the adjudication of Sir Astley Cooper's prize. It was, he says, to have been decided within the last month by the conductors of the Borough schools.

Inquirer (Manchester). The prosecution was instituted by the Apothecaries' Company.

For reasons which we deem it to be unnecessary to state, we have this week refrained from publishing any of the letters which we have received respecting the late meeting at the Crown and Anchor. This remark applies to the caustic communication of *Quiz*, as well as to all the other writers on the same subject. If there be dissensions, it should be our object,—not to increase them, but to promote union, for the sake of the good cause.

Chiron.—We do not see that there is sufficient ground for the publication of such an attack. "Lynch-law" may not be perfect, but it is infinitely preferable to the despotism of the College.

Dr. W. Herbert.—The paper was published at length in Vol. i. of THE LANCET for 1833-34.

Medicus (Edinburgh).—The preparation is manufactured by Mr. Bullock, chemist, Conduit-street, London.

Critic.—The new farce of "Simpson and Co." is not destitute of wit, or pungency of expression, but we consider that its inuendos are unjust and without foundation.

Anti humbug.—If there were a properly-constituted system of medical government, the "circular" quacks would be expelled from the ranks of the profession. Unless there be such a government there is no remedy. We invite the assistance of our correspondent to obtain it.

The letter of *An Army Surgeon* shall be published next week.

Communications have been received from *Mr. Holmes Coote*, *Dr. Chambers* (second part), *Dr. B. Cassel*, *Dr. Wright* (continuation of paper on Saliva), *Mr. J. Churchill*, *A Borough Student*.

INTERVIEWS AT THE OFFICE.

COMPLAINTS having been repeatedly made to us of the uncertainty which has attended the endeavours of our correspondents to obtain interviews with some person who could exercise authority in the editorial department of this Journal, we embrace this opportunity of stating that, in future, the

SUB-EDITOR OF THE LANCET

WILL ATTEND AT THE OFFICE, PRINCES-STREET,

On Mondays and Wednesdays,

From the hours of ONE to THREE o'clock.

It is particularly requested that all *communications* and *articles* which are forwarded for *publication* in THE LANCET, be sent to the EDITOR, at the OFFICE; and that letters of a private or personal character, which may refer, in any manner, to the proceedings of the Journal, be addressed to the EDITOR, at his residence, in BEDFORD-SQUARE.

ERRATUM.—Page 523, col. 2, line 32, for "nitrate," read *urate*.